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NEWS SUMMARY

Pole elected as new Pope

The first non-Italian Pope for 450 years was elected yesterday. He is Cardinal Karol Wojtyla of Poland and he will take the name John Paul II, in honour of his predecessor, who reigned for only 33 days.

The decision came as a complete surprise and met with a muted reaction from the crowds assembled in St. Peter's Square.

The new Pope was Archbishop of Cracow. He is only 58, the son of a factory worker and before becoming a priest he too worked briefly in a chemicals factory.

He was consecrated a bishop in 1958 and was made a Cardinal 11 years later by Pope Paul VI.

The choice of an East European is particularly significant because relations between the Vatican and Poland have been strained for 20 years, though they have improved in the last two years.

Pope John Paul II has a pastoral background though he studied extensively in the fields of philosophy and theology.

GENERAL

Minister calls off seal hunt

The controversial cull of grey seals in the Orkney Islands was called off by the UK Government last night in a major victory for conservationists.

Bruce Millan, Scottish Secretary, said the Norwegian hunters were being withdrawn because of "public concern."

The cull has attracted world attention as the Greenpeace conservation group played a cat and mouse game with the Norwegian seal ship Kvitingen

Hope for tanker

Hopes of preventing serious pollution from the stricken Greek oil tanker Christos Bitas were rising as gale force winds began to abate and pumping operations were stepped up. There is also optimism that the ship can be saved. Page 9

Prentice out

Reg Prentice, former Labour Minister, made a last-minute withdrawal from the contest for selection as Tory candidate in Moray and Nairn. Mr. Prentice said he had made his decision after spending the weekend in the area.

'Dying' Telegraph

Lord Hartwell, chairman and editor-in-chief of the Daily Telegraph, warned that the paper was "bleeding to death" and that it would not be very long before bankruptcy ensued. A printing dispute has entered its 10th day. Page 8

Nobel economist

The 1978 Nobel Prize for Economics has gone to Prof. Herbert A. Simon of the U.S. Carnegie-Mellon University for his "pioneering research into decision-making processes within economic organisations." Page 2

Fire tragedy

Michael Averoff, a Greek shipowner, his wife and baby daughter died when fire gutted their mansion at Esher, Surrey. Firemen found Mrs. Averoff calling for help and she was rescued, but died later.

Namibia talks

Diplomats said the opening session of the Pretoria summit on Namibia had been in a climate which was "conducive to compromise." But South Africa and the five Western powers have not yet talked about the major stumbling block, which is the question of unsupervised elections. Back Page

Briefly . . .

Car ferries between Holyhead and Ireland resumed after the weekend pay dispute.

Man burned himself to death outside a Queensland coal mine in protest at being forced to join a union.

Train service between Iran and Pakistan was stopped without explanation at Iran's request.

Man aged 72 has been charged with sending a murder threat to union leader David Basnett.

Blue Peter, the BBC Television children's programme, celebrated its 20th birthday.

BUSINESS

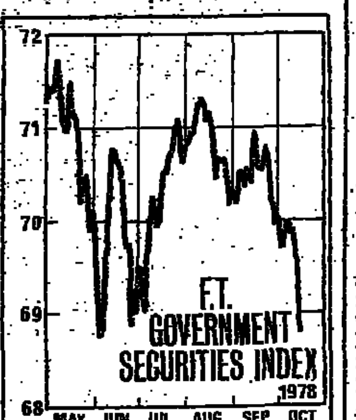
Wall Street falls 21.92; Gilts lose 0.27

● WALL STREET closed 21.92 down at 875.17—its steepest fall in almost four years—due to interest rates worries and disappointment over Congressional action on the tax and energy Bills.

● TOKYO: Nikkei-Dow Jones average rose 45.69 to a new post-war high of 5,797.06.

● EQUITIES gave fresh ground on suggestions of price curbs and stricter Price Commission monitoring of companies breaking the 5 per cent limit. The market steadied later and the FT Industrial Ordinary Share index closed only 1.6 [illegible] 494.6.

● GILTS edged lower in reduced trading. The Govern-



ment Securities Index closed 0.27 down at 68.79—its lowest level since June this year.

● DOLLAR declined after a firmer start its trade-weighted index widening to an all-time record of -0.6 (10.2) per cent.

● STERLING closed 25 points up at $1.9890, its trade-weighted index improving to 62.2 (62.1).

● GOLD closed $½ an ounce down at $224¾. The New York Comex October settlement price was $227.10 ($224.20). Standard grade cash tin rose by £435—the biggest ever single daily increase—to close at a record £7,840 a tonne.

● DEPARTMENT of Trade said that the index of volume of retail sales was provisionally estimated at 110.5 last month, representing a 1 per cent decline on the average level of the previous two months. Back Page

● TATE AND LYLE is negotiating with Anglo American Industrial Corporation the sale of the British sugar group's remaining major South African investment—the 51.6 per cent stake in African Products. Back and News Analysis, Page 34

● FURTHER rise in steel imports is expected to follow a decision by UK steel stockholders to adopt a policy of recommended prices for their steels, replacing the practice of a mandatory minimum price. Back Page

● RUGBY Portland Cement Company pre-tax profit advanced 7.1 per cent from £5.86m to a record £6.28m in the first half of 1978. Page 32 and Lex

CHIEF PRICE CHANGES YESTERDAY

(Prices in pence unless otherwise indicated)

RISES

Albion	26	+ 6
Anderson's Rubber	54	+ 9
Barr & W.A.T. A	169xd	+ 8
Brook St. Bureau	85	+ 5
Dixon (D.)	108	+ 5
Edwards (L.C.)	16½	+ 5
Farm Feed	68	+ 5
Lambert Howarth	54	+ 6
Midland Educational	225	+ 5
Milford Docks	128	+ 8
Mining Supplies	106	+ 6
Peters Stores	48	+ 3
Wallis	86	+ 6
Geevor	155	+ 5
Pacific Copper	68	+ 10
Saint Piran	76	+ 5

FALLS

Exchq. 12pc 1999-02	293[illegible]	– [illegible]
Anglo. Am. Ind.	530	– 30
Brit. Home Stores	204	– 5
Dunbee-Combex	120	– 4
Ransome Sims	178	– 10
Redfearn Nat. Glass	280	– 7
Simon Eng.	270	– 6
Spirax-Sarco	162	– 4
Steel Bros.	215	– 20
Turner & Newall	177xd	– 5½
Anglo American Crp.	348	– 10
Buffels	755	– 58
Kinross	302	– 30
Kloof	542	– 29
Randfontein	£31	– 1¼
RTZ	253	– 5

State aid to back £140m Roche plant in Scotland

BY JOHN ELLIOTT AND RAY PERMAN

A £46m package of State industrial aid put together by the Government in the past six months led the Swiss pharmaceutical group Hoffmann-La Roche to announce yesterday that it would build a £140m Vitamin C plant in Scotland.

Alternative sites in the U.S. and elsewhere in Europe have been rejected by the company after the offer by the Government of an £18m grant under its Selective Investment Scheme on top of £27.6m regional aid.

This is the biggest grant yet offered under the selective scheme, and makes the total package one of the largest assembled by the Department of Industry, which is using its 1972 Industry Act powers to attract foreign projects.

There will be £20m expenditure by local authorities on water and sewerage facilities, plus a railway spur. The factory will be next to a Hoffman-La Roche plant at Dalry, Ayrshire.

The deal, to be reported to Parliament next month, was negotiated by a Whitehall team led by Mr. Alan Williams, Minister of State for Industry.

Mr. Williams said it would bring "substantial industrial and balance-of-payments benefits and will strengthen our industrial base in pharmaceuticals."

The factory will be operated by Hoffman-La Roche's UK subsidiary, Roche Products. It will export 90 per cent of its output and reintroduce vitamin C manufacture to Britain after a ten-year gap

It is intended to supply world markets outside Europe and North America. The demand for vitamin C for the food and pharmaceutical industries is growing at 7 per cent a year, and Mr. William Gerard, Roche Products managing director, estimated yesterday that by the mid-1980s Britain would have a balance of payments surplus of £40m in trade in the product.

The announcement is a considerable psychological boost to Ayrshire's Carnock Valley, which has 12 per cent unemployment and where 700 are to lose their jobs at a British Steel Corporation works in December.

The plant will provide about 1,000 jobs during construction, which is to start immediately and be completed by 1983, and give permanent employment to 430, nearly a third of whom will be graduates or others with advanced qualifications.

The company estimates that 500 more indirect jobs would be created by the plant.

The decision to build a sewer, lack of which has inhibited development in the past, should help attract other companies to an area trying to survive collapse of traditional industries such as coal-mining and steel-making.

As reported two months ago, Hoffman-La Roche had considered expanding alongside its plants in Switzerland, West Germany, or America, as well as building a factory in France.

Mr. Gerard denied that it was merely the financial incentives offered by the UK that tipped the balance, but said the total package offset the disadvantages of the Ayrshire site, such as the distance from the main customers.

The amount of special aid to be given to Hoffman-La Roche, added to other aid either approved or under consideration, means that £150m allocated by the Government to its selective investment scheme may be used up before the scheme expires next summer.

Mr. Williams said that the Government would provide more funds for the scheme

How Whitehall won the order, Page 16

Kodak workers in strike call over 5% offer

BY NICK GARNETT AND ALAN PIKE

DIFFICULTIES FACING companies in keeping settlements within the Government's 5 per cent guideline were emphasised yesterday, when manual workers throughout Kodak's UK operations were recommended to strike indefinitely from tomorrow after the breakdown of pay negotiations.

The company has offered a 5 per cent deal plus a productivity scheme worth 8 per cent on basic rates. But unions representing the 8,000 manual workers say Kodak can and must pay more in wage increases excluding productivity.

The Transport and General Workers Union, which has been leading the battle against the 5 per cent at Ford and British Oxygen, is the largest union at Kodak.

Mass meetings at the company's manufacturing, printing and distribution centres are scheduled today before Ministers and national union leaders meet again tonight in their search for agreement on pay policy.

Kodak union officials said it was unclear whether the recommendation from the company's union council would be accepted at the mass meetings. Overtime bans and a work to rule have also been discussed.

In talks with the unions yesterday, the company stressed the dangers to Kodak and its employees if the guideline was breached and the Government imposed sanctions. The company said its offer, already accepted by white-collar unions, was the best it could make.

At Ford, it was becoming clear that the strike, now in its fourth week, may have entered a prolonged period of deadlock following the breakdown of talks on Friday.

Mr. Henry Ford II, chairman of the Ford Motor Company, has cancelled a visit to Britain which he was to have made as part of a European tour this month because he does not wish to become personally involved in the dispute.

Ford management has already exposed itself to the risk of Government sanctions by offering 8 per cent on basic rates with the promise of more in return for improved efficiency. The company feels that its offer received rather arbitrary treatment from the unions, and is not expected to make an early approach to the unions with an offer of more talks.

Mr. Ron Todd, national organiser of the Transport and General Workers' Union and chairman of the union negotiators at Ford, said that parts of a letter sent by the company to employees yesterday gave a slanted view of the dispute.

He said unions would be prepared to examine with the company means of improving production efficiency when Ford had given a reasonable reply to their entire claim

● Mr. David Ennals, Social Services Secretary, yesterday told leaders of 420,000 nurses that he would put their claim for a 15 per cent "special case" increase to his Cabinet colleagues.

● Sir John Methven, director general of CBI, yesterday rejected the notion of controlling inflation through price controls. He said on the BBC Radio Today programme that he did not accept a 5 per cent pay norm because "everybody believes it is something to be beaten." But most settlements would have to be well into single figures.

NYSE seeks commodities link

BY JOHN WYLES

NEW YORK, Oct. 16.

THE New York Stock Exchange is seeking to negotiate an important diversification of its activities through a merger with the Commodity Exchange (Comex), the largest of New York's six commodities markets.

According to top executives of both exchanges, merger talks are still at a very preliminary stage. Neither is willing to speculate on the sort of organisation which might result from a merger but the motivation for the talks is already fairly apparent.

A reorganisation of U.S. stock markets is extremely likely over the next few years. The NYSE is planning for an era of sharply increased competition. Diversification into commodities trading would help offset any diminution of its present supremacy based on its 90 per cent share of trading volume in the shares of the largest industrial companies in the U.S.

Correspondingly, a merger would boost Comex's importance. Trading principally in gold, silver and copper, Comex has ridden hapily on the back of the world-wide boom in commodities trading, but it still does not rival the Chicago Board of Trade, whose total volume is more than three times larger, and which deals in many more products.

The NYSE has been working on plans for a community market of its own for some time, along with the development of options trading whose expansion in the U.S. is currently frozen by order of the Securities and Exchange Commission.

Acquisition of Comex would be a short cut for the big board, but it may not be without its regulatory complications. Commodities trading is overseen by the Commodities Futures Trading Commission, which is generally held to be less burdensome in the demands it makes than the SEC.

For this reason, the commodities trading establishment would not welcome any move which might involve closer SEC involvement in its affairs. Comex has recently been talking merger with the New York Mercantile Exchange, whose main trading products are potatoes and platinum. Mr. Richard Levine, president of the exchange, argues that this would be the more appropriate consolidation since it will not serve the commodities industry to have stock exchanges riding piggyback on the rising tide of commodities volume.

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For latest Share Index 'phone 01-246 8026

Threat to trade talks by EEC

BY MARGARET VAN HATTEM

BRUSSELS, Oct. 16.

THE EEC Commission today indicated it will not continue with the international trade talks in Geneva unless the U.S. Administration guarantees that countervailing duties will not be applied to imports from the EEC next year.

Unless the uncertainty over the duties is resolved prompty, the talks cannot be concluded in November as was hoped, the Commission said here today.

It was responding to the U.S. House of Representatives rejection yesterday of a Bill to which an amendment was added extending President Carter's authority to waive the duties This authority is due to end on January 3.

EEC Foreign Ministers meeting in Luxembourg tomorrow are expected to discuss the issue and may consider retaliatory action.

The Commission said today it regretted that the U.S. Congress had gone into recess until mid-January without extending the waiver. It was also seriously concerned that Congress had approved legislation excluding textiles from the Geneva talks.

"The fact that legislative action can now be ruled out before Congress reconvenes does not, we assume, exclude the possibility of a solution by administrative means," the Commission added.

Commission officials said afterwards they did not have any specific action in mind but wished to show firmly that the ball was in the U.S court.

"When people are hard put to it, it is amazing what their lawyers can find—they may be able to dig up some weird presidential powers, they added.

Unless the Administration finds a way to extend the waiver, the U.S Treasury will be obliged by law to impose duties on some subsidised EEC exports, mainly dairy products and canned hams. The value of products likely to be affected is estimated at more than $400m a year.

Jurek Martin writes from Washington: Mr. Robert Strauss, President Carter's special trade representative, and Mr Michael Blumenthal, the Treasury Secretary, met today to see if there were administrative ways round the problem

Carter seeks to nullify Congress stand Page 6

Dollar falls after D-mark revaluation

BY MICHAEL BLANDEN

THE DOLLAR slid further yesterday as foreign exchange markets adjusted to the weekend news of the West German D-mark's revaluation within the European snake and to developments in the U.S

The increase in the D-mark's value—by an average of just under 3 per cent against other member currencies—relieved the pressure on the snake which had built up last week Member currencies were quoted within their new limits.

It was taken as an encouraging sign for the current talks on a broader European monetary system, indicating the possibility of making timely and orderly adjustments within a system of limited exchange rate fluctuations. This point is likely to be made to Mr. Callaghan, who visits Bonn tomorrow.

However, the markets felt the adjustment announced late on Sunday night was not large enough to prevent pressures on the snake from recurring or to reduce the movement of funds from the dollar into the D-mark.

The dollar was helped briefly in early dealings yesterday by President Carter's success at the weekend in getting the overdue Energy Bill through Congress.

But the improvement was quickly lost, as the underlying adverse view of the dollar was re-asserted.

The trade-weighted depreciation of the dollar, as calculated by Morgan Guaranty at noon in New York, widened to a record 10.6 per cent, compared with 10.2 per cent on Friday. The dollar slipped to DM 1.8530 at the close of London trading, against DM 1.86 previously, and in spite of intervention it dropped to SwFr 1.5192½ against SwFr 1.5265.

The U.S. currency was also under pressure against the Japanese yen, ahead of the announcement of the September Japanese trade surplus of $2.11bn—second only to the record surplus in June.

Pressure on the dollar has been one of the main factors which has led to the growing strain within the European snake in recent weeks. The movement of funds has concentrated mainly on the strong European currencies, and after Swiss measures to discourage inflows a fortnight ago, attention switched to the D-mark.

This pushed the West German currency to its ceiling, against its partners in the snake, and required growing intervention to keep the rates within the official limits.

In West Germany Herr Hans Matthoefer, the Finance Minister, said the revaluation had become technically inevitable.

In the realignment, the D-mark was raised by 4 per cent against the Danish and Norwegian kroner and by 2 per cent against the Dutch guilder and the Belgian and Luxembourg francs. Yesterday, it was announced the Austrian schilling had been devalued by 1 per cent against the D-mark.

The pound slipped on the early strength of the dollar and was weaker against the D-mark. But it recovered against the dollar to end with a gain of 25 points at $1.9890, with its trade-weighted index rising from 62.1 to 62.2.

[illegible] in New York

—	Oct. 16	Previous
Spot	$1.9950-9940	$1.9840-9850
1 month	0.55-0.46 dis	0.45-0.49 dis
3 months	1.70-1.60 dis	1.57-1.61 dis
12 months	6.90-5.30 dis	[illegible] dis

Germany now in minority on monetary system

BY GUY DE JONQUIERES

LUXEMBOURG Oct 16.

A MEETING of EEC Finance Ministers in Luxembourg today left Germany along with Denmark and the Netherlands in a clear minority in their attitude towards key aspects of the proposed exchange rate mechanism to be used in the European Monetary System and the amounts of credit to underpin it.

The three Governments were alone in resisting proposals that would impose an obligation on strong—as well as on weak—currency countries to intervene on foreign exchange markets and take corrective measures when currency movements indicated that a change in their economic policies was warranted.

The Prime Minister and the Chancellor of the Exchequer—fortified by a marked shift of attitude among other EEC countries towards the monetary system—are expected to urge the German Government at their talks in Bonn later this week to modify its position on how the scheme should work in practice.

The Germans, Danes and Dutch were the only delegations to insist that the amount of credit available for drawing in the EMS should be effectively limited to much less than the 25bn European units of account (£16.7bn) agreed by EEC leaders at their meeting in Bremen last June.

According to calculations by other delegations the German interpretation of the agreement would restrict the credit available to no more than 16bn units of account—and possibly less.

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Inflation adds to fears of industrial unrest in Italy

BY RUPERT CORNWELL ROME, Oct. 16.

A SHARP spurt in inflation, coupled with a tough bargaining position taken by the country's metal and engineering workers, have increased the risk of a turbulent autumn on Italy's industrial front.

The September retail price index, published by the Statistics Institute, shows an increase of 1.3 per cent, the worst monthly return this year and far above the 0.4 per cent increase registered in August.

It comes immediately after the Engineering Workers Union, the 1.5m members of which and its strong representation in vital industrial concerns such as Fiat make it a pace-setter in the forthcoming round of wage negotiations, has scheduled a nationwide strike for November 16 in support of its demands.

These include a reduction in the working week to between 36 and 38 hours over the three-year life of the new contract which runs until 1981, and an average monthly increase of L30,000 (£19), considerably in excess of the figure being talked about by the Government or the leaders of the most powerful union groups.

The tough line is no more than *an opening salvo for the negotiations* with the employers. But its adoption as an 11th-hour compromise by the metal working and engineering representatives of the big organised unions is a sign of the latters' fear of being outflanked by a militant rank and file.

This potential unrest can only be fuelled by the inflation figures showing that consumer prices have risen 12.2 per cent in the last year. The task of the Government in containing inflation will become correspondingly more difficult.

The holding down of labour costs is a cornerstone of the new economic strategy laid down by Sig. Filippo Maria Pandolfi, the Treasury Minister, and is intimately bound up with the survival of the present Government, supported by all major parties.

Sig. Luciano Lama, head of the Communist-dominated CGIL, and leaders of other major unions have shown some readiness to go along with the Government. But weighing deeply on their calculations is the worry that whatever they accept may be rejected by the shop floor.

Continuing impasse in Belgian political crisis

BY GILES MERRITT BRUSSELS, Oct. 16.

THE BELGIAN political crisis triggered by last week's abrupt resignation of M. Leo Tindemans, the Prime Minister, today appeared to be no nearer a solution.

Should the present attempt to form a new coalition government without resorting to a general election end in failure, there are fears that the political impasse over Belgium's long-standing language war could harden into a damaging stand-off.

The possibility that the present crisis could develop into a much more serious political clash began to suggest itself here today at the end of the latest round of apparently fruitless talks between party chiefs and M. Paul Vanden Boeynants, the ex-Premier charged by King Baudouin with forming a new government.

M. Vanden Boeynants, a 59-year-old political veteran who was Defence Minister in M. Tindeman's Cabinet, originally had been scheduled to see King Baudouin today, when it was *widely expected that he would* be able to announce a reconstituted coalition and a new government. It now appears, however, that M. Vanden Boeynants is meeting stronger resistance than at first expected.

Apparently he is facing opposition from inside the Flemish CVP wing of the Social Christian Party, whose opposition to details of M. Tindemans' plan for splitting Belgium into three autonomous regions prompted *his resignation last Wednesday*. M. Vanden Boeynants, as president of the Francophone PSC wing of the same party, had reportedly hoped to overcome that opposition, but after three days of sustained talks has yet *to do so.*

Nobel prize for economics won by Professor Simon

BY WILLIAM DULLFORCE STOCKHOLM, Oct. 16.

THE Royal Swedish Academy of Sciences today awarded the 1978 Nobel Prize for economics to Professor Herbert A. Simon of America's Carnegie-Mellon University, for "his pioneering research into decision-making processes within economic organisations." Prof. Simon, 62, will receive a cheque for SKr 725,000 (£84,500).

The citation accompanying the award states that modern business economics and administration research are largely based on Professor Simon's ideas. He is described as "an economist in the widest sense of the word" who has had something important to say in a wide range of disciplines covering science theory, applied mathematics, statistics and operations analysis.

Starting with his "epoch-making" book Administration Behaviour in 1947. Professor Simon rejected the assumption made in classic economic theory of an omniscient, rational, profit-maximising entrepreneur. He replaced this entrepreneur by a number of co-operating decision-makers, whose capacities for rational action were curtailed by personal and social ties and by lack of knowledge of all the consequences of their decisions.

He developed his theories in a series of books, of which the three published while he was professor of administration and psychology at Carnegie-Mellon in 1949-65 were especially influential. These were Public Administration, Organisational Man, and Organisations.

Professor Simon's theories and observations about decision-making are less elegant than the classic profit-maximising theory but they explain very well the systems and techniques of planning, budgeting and control used in modern business and public administration.

They also explain the development that has taken place within companies as running them has become increasingly separated from owning them. Professor Simon has mapped the radical changes in companies' behaviour as employees form trade unions, as the rate of expansion increases and as price competition between many is replaced by competition in quality and service among a few.

Moreover, Professor Simon's theories have been used successfully to explain and predict the distribution of decision-making *within companies, the adjustment* of markets to limited competition, to choose investment portfolios and to select countries in which to make foreign investments.

Greek Left holds ground in poll

BY OUR OWN CORRESPONDENT ATHENS, Oct. 16.

OPPOSITION parties in Greece retained the mayoralties of major cities where they put forward joint tickets in the municipal elections at the weekend. But they failed to obtain increases in terms of vote percentages which would have been translated as a decrease in the government's popularity since November's general elections.

In Athens, which has about 500,000 of the 6.6m registered *voters, the key to the town* council is held by the Communists whose vote will be decisive in Sunday's run-off election.

With most of the votes counted, Mr. George Plytas, a member of the ruling New Democracy party, who resigned last month as Minister of Culture, received 42.1 per cent and Mr. Demetrios Beis, the candidate of the Panhellenic Socialist Movement (PASOK), the union of the Democratic Centre and the Eurocommunists, polled 40.6 per cent. Both failed to obtain the required absolute majority.

If anything, the results show that the Moscow-line Greek Communist Party (KKE) increased its strength in Athens to 16.3 per cent of the votes, from the 11.5 per cent it obtained in the general elections.

Some observers attribute this to the fact that there were about 600,000 new voters this time, most of them Greeks who gained the right to vote after the age was lowered from 21 to 20.

Also, composer Mikis Theodorakis, the KKE candidate, may have swung the vote of personal admirers and left-wingers, not necessarily Communists.

Crucial in deciding which way the pendulum will finally swing will be the 135,000 voters in the Athens area who abstained. The government has now said that absenteeism is punishable by law.

Political analysts agree that the Government's recent swing towards the centre of the Greek political spectrum and the inclusion in the Cabinet of liberal politicians do not seem to have paid the dividends expected in terms of votes.

Also, the Government's recent unpopular tax measures (under which the income of a Greek is now assessed by the size of car he owns, the rent he pays, the number of servants he employs, and whether he owns a country house or a pleasure craft or buys property) may have cost it a good number of votes.

Industry recovers

By Our Own Correspondent

PARIS, Oct. 16.

FRENCH INDUSTRY has recovered its midyear slack and *overcome the setback in production* levels registered in June, according to Government statistics.

The Industrial Production Index, based on 100 in 1970, was back in July and August to its *May level of 127.*

French sea strike spreads

BY DAVID WHITE PARIS, Oct. 16.

FRENCH MERCHANT seamen today extended a protest strike which began on Friday and which has received almost total backing in Atlantic, Channel and Mediterranean ports.

Unions, which are fighting against the employment of *foreigners at lower rates, warned* that they were prepared to extend the scope of the strike to paralyse all port activity.

At the same time, the recent wave of strikes in the public sector—the railways and Post Office—has spread into the private sector, where protest action is planned this week in steel and shipbuilding.

Garda to hold out for 40% pay rise

By Stewart Dalby

DUBLIN, Oct. 16.

INDUSTRIAL ACTION by Ireland's police force, the Garda, by the end of this week *seems certain after the Government's refusal to set up a special pay review body.*

The Government has offered a speeded-up conciliation and arbitration service to consider the pay claim of about 40 per cent, but the four Garda *organisations are expected to* reject the proposals.

Further meetings between the Garda's representatives and Mr. Gerard Collins, Minister of Justice, are scheduled for tomorrow and the dispute *is also expected to figure at* a Cabinet meeting.

The Garda have been demanding pay increases to bring them into line with their counterparts in Northern Ireland and Britain. They say that *although they were well paid* even five years ago, they have fallen behind their counterparts in Britain by between £25 and £30 a week. The average take-home pay for a Garda member is £65.

The Garda are prohibited by law from striking but they have aired the possibility of various forms of industrial unrest including not attending courts on days off, restricting the number of patrols they will *make, banning overtime, and stepping up the number of* parking tickets issued.

Trade surplus in Switzerland

BERNE, Oct. 16.

SWITZERLAND had a trade surplus of SwFr 125m in September after a revised deficit of SwFr 156.7m in August and a deficit of SwFr 30m in September last year, the Federal Customs Office said.

Imports in September were SwFr 3.41bn compared with 3.19bn in August and 3.70bn in September last year, while exports were 3.53bn against 3.03bn and 3.67bn respectively, an office spokesman said.

In the first nine months of this year Switzerland had a trade deficit of SwFr820.9m compared with a deficit of SwFr 1.46bn in the same year and period.

Reuter

Madrid moves closer to recognising the Polisario Front

BY ROBERT GRAHAM MADRID, Oct. 16.

SPAIN HAS taken a further step towards the formal recognition of the Algerian-backed Saharan Liberation Movement, Polisario. In so doing, further strain has been placed on Spain's relations with Morocco.

Over the weekend the Government party, Union de Centro Democratico (*UCD*) approved a statement which said that peace in the Maghreb could only be achieved "by respecting the wishes of the Saharan people and their right to self-determination and *freedom.*" This statement, worked *out by the UCD's* spokesman for foreign affairs, Sr. Javier Ruperez, was against the advice of the Foreign Ministry which in public is still seeking to avoid recognition of Polisario since this would *alienate Morocco.*

However, Sr. Ruperez with the support of his party pressed ahead with the statement — a statement which was a pre-condition for securing the release of eight Spanish fishermen held by Polisario. A previous *group* of Spanish fishermen held by Polisario had been released on the initiative of the Socialist Party which already supports Polisario.

Although the statement is the view of the Party, not the Government, it is likely in this *instance to be attributed* to the Government. Because of this the Foreign Ministry is said to be extremely angry at such undermining of its authority.

At best it will make it difficult for Spain to tell the Moroccans *that it is now abiding* by the 1975 tripartite agreement with Mauritania and Morocco which specifically excluded recognition of Polisario and gave de facto sovereignty of the former Spanish colony to Mauritania *and Morocco.*

In the past two months Spanish policy has shifted towards support for a negotiated settlement to the Saharan conflict which would give some form of recognition to Polisario. Sr. Ruperez *last month* attended a Polisario congress at Tindouf in Algeria.

The real fuss provoked by UCD's action is more one of principle. For reasons which look like thinly disguised political opportunism—gaining *kudos for the Party in advance* of UCD's congress which opens on October 19—the Government Party has been willing to undermine the authority of one of its key ministries.

Basque police protesters transferred by Suarez

BILBAO, Oct. 16.

THE Madrid Government today began the transfer of 300 angry policemen who demonstrated over the weekend in Spain's Basque region calling their superiors assassins and accusing them of being soft on terrorism.

In the most drastic move so far by the Centrist Government of Premier Adolf Suarez to stamp out growing police dissidence, the policemen and their families were ordered out of the Basque area as two companies of reserve police were rushed in to take over in Bilbao.

In Madrid, the opposition Spanish Socialist Workers' Party warned the Basque unrest was threatening post-Franco democracy.

The mass police transfer came within hours after policemen in plain clothes and in uniform beat on official cars of the military and civilian governors following a funeral for two slain policemen.

The Basque separatist organisation, ETA, today formally claimed the killing of the two officers. And terrorists believed to be Basque separatists shot another police victim, their 22nd this year, a few miles away as the funeral was being held.

AP

Easier banking law urged as aid to Arab investment

BY PAUL BETTS ROME, Oct. 16.

A CALL for an easing of banking legislation to facilitate greater short-term Arab investment in Italy was made today by Mr. Abdulla Saudi, chairman of the Libyan Arab Foreign Bank.

Speaking at the Financial Times conference, jointly organised with the Italian state agency for the promotion of industrial development in the South (INSUD), Mr. Saudi said Italy now enjoyed a very good position in the Arab world.

He added: "The prevailing *monetary and banking legislation* does not help in bringing short money into the country . . . and before expecting a direct investment in any country one has always to start with a short-term investment."

Mr. Saudi referred to the celebrated deal between the Libyan Arab Foreign Bank and the Italian car group, Fiat. At the time, he recalled, he was asked why Libya decided to invest in a country with a sick economy like Italy. "My answer was that we believed in the potential of the Italian economy."

Since the Fiat-Libya deal, two years had elapsed, and although not all Libya's expectations had bee met, there were clear signs of *improvement in the Italian* economy, according to Mr Saudi. Inflation now stood at about 13 per cent compared to 22 per cent in early 1977. The balance of payments deficit of $2.9bn in 1976 had been transformed to an envisaged surplus of some $5bn this year.

"Italian firms," Mr. Saudi said, "whether private or public, who failed to attract funds from the international market a few years ago, can easily obtain funds with very attractive margins. A few years ago the Government borrowed money against their gold reserves. They are now paying such loans prior to maturity, and during the last two years we have seen a stable lira in the foreign exchange markets."

The central theme of the conference, which is focused on Italy's attempts to attract investment, especially for its depressed South, was outlined in the opening address by Sig. Antonio Bisaglia, Italian Minister of State Holdings.

The state sector, he said, planned to invest L18,000bn over the next five years, which was additional to an eventual recovery of private and foreign investments in Italy. This problem was tackled in a paper presented by Mr. John Davies, Britain's Conservative Party Shadow Foreign Secretary, while the financial structures and credit policies in the development of the Italian South were outlined by two Bank of Italy officials, Sig. Luigi Patria and Sig. Vincenzo Pontolillo.

Sig. Rinaldo Ossola, Italian Foreign Trade Minister, said that on present trends, in theory at least, the volume of Italy's ex*ports was expected to increase* by between 4½ and 5½ per cent annually during the next three years.

He stressed that there were a number of conditions if Italy was to maintain its share of the world market. These included the condition that the more prosperous economies of the industrialised world should keep up demand and that Italy should *succeed at last to reform the* basic structural weaknesses of its economy, namely the ever-expanding enlarged public deficit and the continuing rise in labour costs.

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Italy, he added, would have to keep up its export drive in *member nations of the Organisa*tion of Petroleum Exporting Countries and in developing countries, as well as in Socialist states. The latter represented a major problem in view of their requests for export credit lines *and Italy's limitations in this* field. This issue would probably be one of the major difficulties which Italy would encounter in its attempts to increase trade with China, Sig. Ossola said.

In relation to Italy's three-year economic recovery plan, Sig. Luigi Ciriaco de Mita, Italian Minister for the Mezzogiorno, said the question of the depressed South represented the core of Italy's economic policy, and that the Government's *recovery programme aimed at* creating a sustained process of accumulation to stimulate the development of the South.

He stressed that the development policy for the South should not repeat earlier unco-ordinated *and undisciplined models.* Sig. de Mita outlined the main areas in which the Government intended to intervene. These included special public works investments, infrastructure projects and a series of financial incentives to encourage private and foreign investment.

The consensus of the Financial Times-INSUD conference was that the problems of Italy and the South could not be viewed in isolation from the overall economic outlook for Europe, the immediate prospects of which were analysed by Dr. Garret FitzGerald, former Irish Foreign Minister.

Dr. FitzGerald detected some tentative indications that, unlike their reaction to the 1973 oil crisis, EEC member countries were now prepared to take concerted action towards co-ordinated growth to deal with unemployment. But he emphasised that any assessment of European economic prospects must take into account the Franco-German proposal of a new economic monetary system, although he thought its impact both short-term and medium-term was difficult to assess.

"Clearly the intention of the authors of the scheme is that it should have a stabilising effect in the monetary sphere, and thus, in time, have a positive effect upon economic growth."

He added: "If member Governments, including, in particular, surplus countries like Germany, are really committed to the full implications of a European monetary system, and are prepared to pay the necessary price of making this system work, then the move towards monetary union is clearly to be welcomed. The concern that exists among some politicians, and an even larger number of economists, about the way this matter is being approached stems, however, from doubts as to whether the necessary commitment exists to make the scheme work in a balanced *and fruitful way.*"

At the same time, the plan to introduce the system quite quickly also had possible short-term implications for member states, for it could have a short-run destabilising effect in certain instances. Dr. FitzGerald, *in particular, pointed out that* there had already been public discussion as to whether, and to what extent, the United Kingdom ought to devalue its currency before entering the European monetary system.

Moreover, he said, there had been talk of a speculative movement of capital from Britain to Ireland with the hope of taking a quick profit after the system was established, should the Irish pound rise in relation to sterling as could happen especially if Britain decided not to enter the system.

Both Lord Thomson of Monifieth, the former EEC Regional Commissioner, and Sig. Antonio Giolitti, a member of the Commission of European Communi*ties, dwelt on the problems of* regional policy and the key issue of transfer of resources.

Lord Thomson stressed the need for the establishment of a real European Community regional strategy, and said that a major role would have to be played by agricultural expenditure and policy.

Sig. Giolitti claimed that the real issue was the co-existence in the Community of a series of structurally different economies. Mr. Fernand Braun, EEC director-general for internal market and industrial affairs, also discussed the role that European industrial policy played in the less privileged regions.

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Special investment fund to help Spanish economy

BY ROBERT GRAHAM MADRID, Oct. 16.

THE SPANISH government is proposing to set aside a special Pta 80bn (£660m) investment fund in the 1979 budget to stimulate the economy. However, use of this money will be discretionary, conditioned largely by the trend in wages and prices.

This cautious approach to reflation is the main feature of the Government's budget for the coming year that will shortly be submitted to Parliament. The budget anticipates a 20 per cent increase in ordinary expenditure to Pta 1.732bn. But the increase in spending will be much more substantial if the Government chooses to disburse part or all of the special investment money, which is being treated as an additional allocation.

The Government calculation is that if inflation can be brought down to an average of 12 per cent, then the real increase in spending will be in the order of 8 per cent. The issues of inflation and public funds to stimulate investment are intimately linked to discussions now in progress, both between the political parties and between labour and management over a new social contract.

The outcome of these discussions, which it is hoped will produce wage guidelines, money supply and inflation targets, will directly influence the final approved budget.

The ordinary budget envisages a deficit of Pta 154bn, two-thirds of which will be financed by resort to public debt—an instrument which the authorities are beginning to use much more extensively. The remainder will be funded by foreign borrowing. The special investment fund is expected to be financed directly by the Bank of Spain.

For 1979 the Government has decided to continue the practice of presenting a separate budget for social security which covers pensions, unemployment and national health. The budget for this Ministry is scheduled to increase 24 per cent to Pta 1.590bn. With a budget only 10 per cent less than total ordinary expenditure, social security spending has become a vast unmanageable monster within *the Administration*. There have been frequent allegations in recent weeks of serious corruption, which have led to the sacking of some senior officials.

In the coming year the Government hopes to make social security savings equivalent to 2 per cent of total spending through improved management. Also for the first time social security will be obliged to submit quarterly accounts.

Lisbon suspends return of land

BY OUR OWN CORRESPONDENT LISBON, Oct. 16.

IN WHAT appears to be an attempt to defuse an increasingly tense atmosphere in the southern grain belt of the Alentejo, the Government today temporarily suspended further returns of expropriated land to private ownership.

Violence broke out at the weekend in the region following a decision by the Ministry of Agriculture to proceed to apply without any further delay the controversial Agrarian Reform Law. Paramilitary police using truncheons and specially trained dogs physically forced agricultural workers out of at least four Communist-controlled collectives.

It was the first time that peasants and police had clashed in the region since September 1977 when the then Socialist-led administration first attempted to apply the law.

Police brutality was condemned during a weekend speech by Sr. Alvaro Cunhal, the Secretary-General of the Portuguese Communist Party (PCP).

"The Government is setting the Republican guard against the workers and is creating a climate of civil war in the land reform area," Sr. Cunhal said, in one of his most virulent attacks so far against the present administration.

Meanwhile, President Ramalho Eanes is expected to resume his talks with the main political leaders early this week before deciding on a solution to the country's political crisis.

The present Government is theoretically functioning only in a caretaker capacity following its defeat in parliament last month.

PORTUGAL AND THE EEC

Constancio puts the case

BY JIMMY BURNS IN LISBON

SITTING IN his old vice-governor's office at the Bank of Portugal, Sr. Vitor Constancio looks happier and more relaxed than he did earlier this summer when the politicking and divisions of his colleagues in power forced him to abandon the crucial post of Minister of Finance. Slightly shy and unassuming, puffing on his pipe with the casual air of a university don, Sr. Constancio is one of Portugal's more discreet survivors.

Tomorrow, as president of the Portuguese Commission for European Integration he will be in Luxembourg at a ceremony marking formal acceptance by the EEC Foreign Ministers of Portugal's request to open accession negotiations. Although full-scale talks have been delayed until next year, the ceremony effectively takes Portugal one step nearer to full integration into the European community.

Ever since Sr. Constancio was made chairman of the committee in charge of making the first approaches to Brussels in 1976, politics has always been the most compelling reason for letting Portugal in to the Community. After the country's chaotic revolutionary experience following April 25, 1974, acceptance into the European fold seemed the best guarantee for future political stability. Yet it is economics that will be at the centre of talks leading up to Portugal's eventual admission.

Sr. Constancio, in that respect, remains the most obvious choice for the job. When talking about the EEC and what it will mean to Portugal, he applies the same economic logic as he maintained throughout his negotiations with the IMF. He passionately defends deflation as a necessary short-term solution to Portugal's ills against the criticism of some Commission economists who would pefer to see an immediate restructuring of Portuguese agriculture and industry and more immediate EEC aid.

"In order to envisage a more active development policy, we have first to reduce our deficit," Sr. Constancio says, adding that it was EEC member states which were among those countries that made future credit conditional on Portugal's agreement with the fund.

Sr. Constancio is confident that Portugal has proved not only that she can agree to an IMF deflationary programme but also that she is capable of sticking to it. And this is already having its effect on the international capital market and the external financing of the country's balance of payments deficit.

Nevertheless, although optimistic that there is now some light at the end of the tunnel, Sr. Constancio admits that Portugal will need time, probably as much as twelve years, before she can experience the kind of economic reforms called for by the Commission.

Sr. Constancio insists, that, given the country's present balance of payments position, it is still unrealistic for the commission even to suggest that the Portuguese Government liberalise present restrictions on capital movements, particularly regarding outflows. He refers too, in no uncertain terms to the touchy problem of textiles. "We have been severely hit by the restrictions which the EEC has imposed on us with regard to the textile industry."

Sr. Constancio is less threatening about other aspects of Portugal's entry into the EEC. Portugal's present constitution, backed up by legislation, makes certain sectors of the economy such as banking closed to private initiative. As a result some experts in Brussels have suggested that this might create large difficulties if Portugal were to become a member State. Sr Constancio challenges this assumption, and emphasises that the Treaty of Accession and full negotiations will only begin after 1980, the date already set for the revision of the constitution.

"One of the great advantages of membership is that it will stimulate many positive changes in our institutions," he says. He reveals, for example, that the Ministry of Finance has already been "stimulated" into beginning a thorough overhaul of the country's archaic tax system, which, until now, has been out of line with the rest of Europe. Concrete plans are in progress for the introduction of VAT.

Sr. Constancio is similarly confident that the Portuguese Government will also be stirred into developing a regional policy (something which until now has been non-existent in Portugal) so as to draw from the Community's regional fund.

D-mark revaluation inevitable, Bonn Finance Minister says

BY ADRIAN DICKS BONN, Oct. 16.

LAST NIGHT'S revaluation of the Deutschmark by a little less than 3 per cent within the European "snake" had become technically inevitable by the end of last week, as Herr Hans Matthoefer, the West German Finance Minister, made clear in a statement this morning. At the same time, it has been demonstrated again that the snake can handle necessary adjustments in timely and orderly fashion, which is seen in Bonn as a desirable political objective in the light of today's deliberation in Luxembourg.

The point is also likely to be made emphatically to Mr. James Callaghan, the British Prime Minister, when he comes here on Wednesday for talks with Chancellor Helmut Schmidt and his Ministers, in which the centre of interest will be Britain's attitude towards the projected European monetary system (EMS).

The full technical background to last night's snake realignment will be known only when the Bundesbank issues its weekly statement for the week up to last Friday. It has reported already, however, that some DM 2.4bn was spent on intervention within the snake in the week up to October 7.

Foreign exchange market estimates of the scale of Central Bank interventions suggest that the pace accelerated to the point where the Bundesbank took in DM 1.5bn last Friday alone.

Dr. Otmar Emminger, the Bundesbank president, said this morning that the bank had had to absorb over DM 10bn in intervention operations within the snake during the past three and a-half months.

Herr Matthoefer also expressed concern at the pace of monetary growth, to which currency unrest had been contributing. Figures showing the growth of the money supply for the summer months are expected to be published later this week and indicate a sharp acceleration since the spring.

German officials see the continued weakness of the dollar as the main reason for the turbulence of exchange markets in recent weeks, though the 4 per cent revaluation of the D-mark against the Danish and Norwegian currencies and the 2 per cent upward adjustment against those of the Benelux countries, also reflect increasing divergence of inflation rates.

The further decline of the inflation rate in West Germany to under 2.5 per cent and the growing number of other indications of strength in the economy, have also played a part in the D-mark's most recent display of buoyancy.

The most compelling indication for the outside world has been the DM 23.8bn trade surplus in the first eight months of this year—fully DM 1.2bn above that for the same period of 1977. Dr. Emminger and others have stressed that this was partly the result of improved terms of trade following the D-mark's firmness against oil and other raw materials, the prices of which are denominated in dollars.

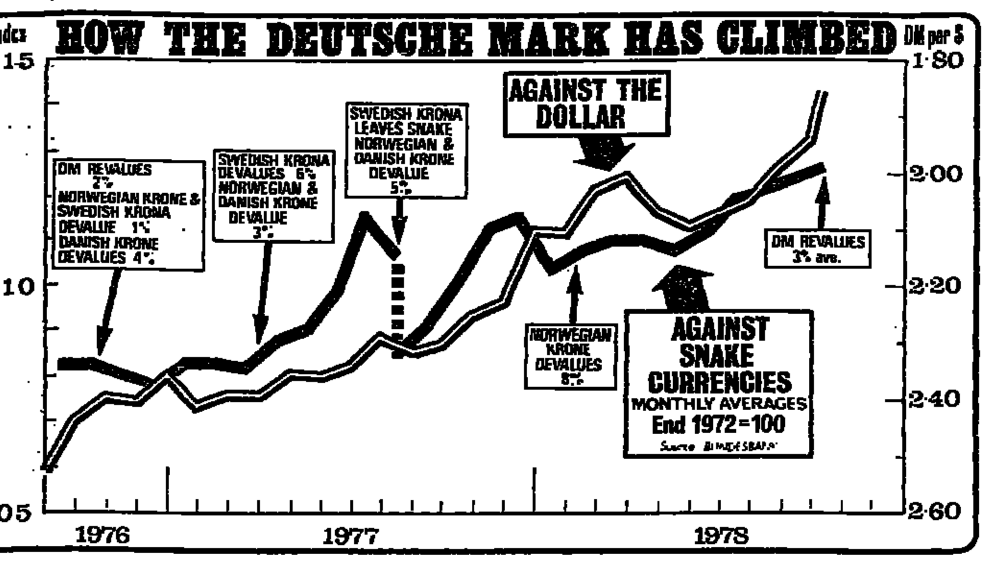
Yet it has also been impossible to escape the conclusion that, for all the cries of alarm at the beginning of this year, West German exports have put up a remarkable performance.

New orders from abroad have been running well ahead of the previous year and, in such key industries as plant construction and engineering, seem to have held up well after some indications of hesitancy on the part of foreign customers early in the spring.

Until foreign exchange markets began seriously to anticipate the setting-up of the EMS, and until the recent defensive measures by the Swiss National Bank, the Deutsche Mark had shown much less upward movement this year than last.

From the end of 1977 to last Friday, the Deutsche Mark had risen 13.1 per cent against the dollar, yet only 5.4 per cent against the weighted average of West Germany's 22 most important trading partners' currencies.

The increase against the fellow-snake currencies was only 1.3 per cent during the period. Since the other snake members account for 20 per cent of West German exports, the West German authorities seem justified in their enthusiasm for the system for those who can keep up with it, and will doubtless press the point to Mr Callaghan and Mr. Denis Healey later this week.



Austria devalues against D-mark

By Paul Lendvai

VIENNA, Oct. 16.

AUSTRAIA today carried out a de facto devaluation of the schilling against vis-a-vis the West German mark by 1 per cent but at the same time the schilling was effectively slightly revalued against the Danish and Norwegian crowns and marginally against the Belgian franc and Dutch guilder.

The schilling fell today to 733 per 100 marks from 725.

At a press conference Dr. Hannes Androsch, the Austrian Finance Minister, and Prof. Stephan Koren, President of the National Bank, stressed that Austria wanted to weaken its link with the Deutsche Mark, while continuing with its hard currency policy. "This is a signal that we are flexible without completely copying the mark," Dr. Androsch said.

In the first nine months of this year the schilling apreciated by 11.7 per cent against the US dollar and by 2.7 per cent against sterling while droping 1.3 per cent against the Deautsche Mark and 19.5 per cent against the Swiss franc.

Dr. Androsch and Prof. Koren welcomed the revaluation of the West German mark and expressed the hope that henceforth the currency "snake" would be more stable.

They stressed that in terms of inflation and wage increases, Austria's record this year had been better than that of all the other countries involved in the latest currency realignment, with the exception of West Germany.

The consumer price index in September was only 3.4 per cent up on the position a year earlier and wage rates during the January-June period showed a rise of 6.3 per cent.

AMERICAN NEWS

Tax Bill shows growing strength of business

BY STEWART FLEMING

NEW YORK, Oct. 16.

MAJOR concessions secured by the business community in the Tax Bill enacted by Congress at the week-end are indicative of a continuing revival in its political fortunes and a wider acceptance of key elements of its economic philosophy.

Some of the most influential leaders of the business groups are clearly immensely satisfied with the months of work and lobbying which has gone into the tax legislation. Thus Mr. Reginald Jones, chairman of General Electric and the man who has been leading the business roundtable in its moves on tax policy, remarked: "I think the Bill that is shaping up is one which will be acceptable to business."

The Bill finally passed by Congress cut business taxes by $3.2bn and capital gains taxes for investors by $2bn. It included, among other concessions to business, an overall cut in the corporation tax rate from 48 per cent to 46 per cent, it made the 10 per cent tax credit on capital investment in machinery and equipment permanent, and it did not abolish the Domestic International Sales Corporation (DISC). The DISC is a device which allows businessmen to defer about half their Federal tax on export sales earnings.

At one stage earlier in the year it looked as if DISCS might be abolished, but business, in particular the influential Roundtable, has fought these moves successfully.

Other initiatives, which business feared could eliminate existing tax allowances, have also been fought off. Earlier proposals to repeal the foreign tax credit which the U.S., and most industrial nations, give corporations to avoid double taxation, have also not been taken up. Similarly, previous attempts to start taxing foreign corporate earnings before they are repatriated have not been incorporated in the Tax Bill.

While all these decisions can be looked at in isolation from a political and economic standpoint, they fit into a pattern favourable to business and of considerable symbolic significance.

Thus the cut in capital gains tax, taken with the decision to make the investment tax credit permanent, are seen in business circles as important steps towards stimulating lagging capital investment and, through that, beginning to tackle declining productivity in U.S. industry. The acceptance of these steps by Washington's legislators is taken as indicative of a growing recognition in political circles of the need to stimulate capital formation.

Business undoubtedly sees these victories as only the first step in continuing campaigns to evolve a more favourable tax and economic climate.

There is still unease, however, about the process by which some of these decisions were made, in particular the hectic last-minute rush to push through Congress literally dozens of complex tax clauses.

Some economists question the timing of the Bill. Thus the decision to invoke a tax cut was made nine months ago amid concern that economic growth would slow drastically this year. Not only has this not happened but, in addition, the underlying rate of inflation has risen from 5 or 6 per cent to 7 or 8 per cent. The stimulative impact of the tax concessions, particularly those directed at the individual, is questioned even though the concessions in part offset tax increases coming into effect on, for example, social security payments.

Financing for quieter aircraft falls foul of Congress logjam

NEW YORK, Oct. 16.

THE U.S. airline industry was trying to swallow its disappointment today at the failure of the Congress to approve legislation which would have made $3.2bn availablef or re-equipping fleets with quieter aircraft.

The Bill failed to clear the legislative logjam which piled up as Congress worked feverishly over the weekend to pass the energy and tax cut Bills. Its prospects would have been better had the principle fo giving financial help to airlines been non controversial, but many legislators opposed it on the grounds that airline profits are soaring and that, therefore, the industry could afford to finance the new equipment necessary to comply with new noise standards which come into effect in 1985.

The Air Transport Association estimated that between $5bn and $7bn would need to be spent on purchasing quieter engines and new aircraft. A spokesman for the association said today that the industry would now have to decide whether to try again with the legislation after nthe new Congress is elected next month. "Things are a little blue here today," he added.

The loss of the Bill has significance for some airlines but not for others since the pace of fleet modernisation is by no means even.

Peace talks in Nicaragua

MANAGUA, Oct. 16.

OPPONENTS OF President Anastasio Somoza have given foreign mediators proposals aimed at ending Nicaragua's civil crisis, according to an opposition spokesman.

The broad Opposition Front, a coalition of 16 political groups, agreed to negotiate with President Somoza's Government only through foreign mediators, and the first round of talks was held last weekend. The mediators are from the U.S., Guatemala and the Dominican Republic.

The way was cleared for mediation when President Somoza agreed to opposition demands to lift Press censorship and other measures.

The latest proposals call for the President to resign and leave the country, and for the organisation of a "National Democratic and Pluralistic Government which unites all forces.

They also demand implementation of the Front's 16 "minimum points to lay the groundwork for a true democracy in Nicaragua." These include reorganisation of the National Guard, an end to political repression, freedom for political prisoners, a national health programme, and tax and judicial reform.

AP

Mexican Parliament suspends nuclear debate

BY WILLIAM CHISLETT

MEXICO CITY, Oct. 16.

MEXICO'S chamber of deputies, the lower house of Parliament, has decided to suspend discussion of its controversial nuclear legislation for a least a month for revision.

The draft of the nuclear proposal has met stiff resistance from the National Institute of Nuclear Energy's trade union and also from some deputies.

The union is against it because the proposal would divide the Institute into three sections and workers fear the loss of jobs. Deputies have expressed concern that the Bill as written could pave the way for the exploration and exploitation of the country's rich uranium reserves by foreign and private Mexican companies.

There have been highly nationalistic speeches during the debates—Mexico was the first country in the world to nationalise its hydrocarbons—and also Left-wing demonstrations demanding safeguards that uranium will not fall into foreign hands.

The proposal would split the Nuclear Institute into sections for exploration and exploitation research and security. One article of the draft allows the Industry Ministry to authorise the exploitation and exploration of uranium. Deputies see this as totally unnecessary as this will be the function of Uramex, part of the new reorganised Nuclear Institute. This article is likely to disappear.

The legislation is in line with the increased importance which Mexico is giving to uranium following investigations which show that proved reserves are 11,000 tonnes and probable reserves between 300,000 and 500,000 tonnes.

At the moment uranium which Mexico bought in France is being enriched in the U.S. to use in Mexico's first nuclear power plant. Reportedly the first shipment of enriched uranium will arrive in Mexico next month.

Mexico's uranium is very close to the surface and so the country could, with the necessary technology, quickly become a major uranium producer. The Nuclear Institute plans to forge ahead with training scientists so that it does not have to rely so much on the U.S. for its technology.

Brazil's 'palace guard' accused

BY DIANA SMITH

RIO DE JANEIRO, Oct. 16.

SUBSTANTIATION has been given by an army major to charges which were leaked recently alleging corruption, wire-tapping and manipulation of the presidential succession by a "palace guard" surrounding President Geisel.

The accusations were made in a letter circulated to senior military officers by Gen. Hugo Abreu, former head of President Geisel's military household. They were confirmed, and greater detail was given, by Maj. Adalto Barreiros, former assistant to the presidential public relations chief.

First Gen. Abreu and now Maj. Barreiros, have been placed under 20-day military disciplinary arrest. It seemed that, with Gen. Abreu's arrest last week, keeping him out of circulation until after October 15, military leaders hoped to confine the matter to the military forum. This has not been the case.

Once Gen. Abreu had made his allegations of palace guard scheming more accusers came forward, this time with allegations of "commissions" on foreign deals paid into "secret bank accounts."

These accusations were drawn from a secret report said to have been made by a former Brazilian military attache to his senior officers. The existence of this report was originally denied, but the now-arrested Maj. Barreiros has said that it existed and had been shown to President Geisel.

The presidential palace originally kept silent. Last week, however, as it became clear that not only the Opposition, but also members of the pro-Government party Arena, are making detailed accusations of high-level corruption, Presidential officials and Government Ministers have begun to defend themselves, angrily refuting all allegations.

The immediate cause of the resignations from their posts at the presidential palace earlier this year of Gen. Abreu and Maj. Barreiros was their disagreement with the manner in which Gen. Joao Baptista Figueiredo had been selected as presidential successor. Gen. Figueiredo was then chief of the National Intelligence Service (SNI), and it has since become clear that he was chosen without widespread consultation of the military.

Much of the initial dismay at the choice has diluted since Gen. Figueiredo has shown himself publicly to have an earthy, rough-hewn gift for blurting out home truths and projecting an image of a man committed to democratising Brazil.

So apparently overwhelming is his talent for speaking his mind that, this week, when pressed by reporters about the accusations of widespread phone-tapping that—going completely against official Palace disclaimers and hints that the whole matter was a "James Bondian frame of mind" — he admitted that Brazilian phones were, indeed, tapped (but that he had not ordered any bugging while head of the SNI), and that it was the easiest thing to do in the world—but also the hardest thing to abolish.

Space Shuttle likely in 1979

BY DAVID FISHLOCK, SCIENCE EDITOR

THE U.S. National Aeronautics and Space Administration rates its chances of launching its space shuttle before President Carter's next birthday, on October 1, 1979, as rather poor. Mr. Carter had hinted he would like NASA to aim for that date.

After reviewing European progress on space shuttle technology Dr. Robert Frosch, administrator of NASA said in London that there was "a 75 per cent chance" that the space transportation system would make its fist flight before he end of 1979.

The space shuttle is a re-usable rocket system designed to launch payloads weighing up to 30 tonnes into earth orbit.

The European Space Agency, in which Britain is a partner, is building one of the most sophisticated of the non-military payloads, in the shape of Spacelab. After visits to ESA headquarters in Paris, to its main subcontractor in Bremen, and to Farnborough, Dr. Frosch has concluded that spacelab is about three to six months behind schedule—much the same lag as the space shuttle project itself.

He had reassuring news for those who have been forecasting that Skylab—an earlier NASA orbiting laboratory—would fall out of orbit, perhaps on to an inhabited area. He believed that Skylab would survive long enough to take action to make the satellite safe.

This action could be either to "deboost" it under control—that is to steer it safely back to earth—or to boost it into a higher orbit. Dr. Frosch said he favoured kicking it into a higher orbit because—against all expectations—its systems seemed to be in good shape, and the satellite might be brought into service again.

No decision whether to re-inhabit Skylab could be taken until astronauts examined its condition, he said.

The Space Shuttle will be able to pluck satellites out of orbit—a capability which interests the U.S. Department of Defence. It has contributed a large proportion of the project's funds.

But Dr. Frosch emphasised that separate military and civil science missions would be flown to simplify the problems of security on the experiments for the Pentagon.

Pierre Trudeau

By-elections test for Trudeau

By Victor Mackie

OTTAWA, Oct. 16.

A MILLION Canadians are eligible to vote in Monday's record 15 by-elections in what is expected to be a critical personal test for the Government of Prime Minister Pierre Trudeau.

Advance indications are that the Conservatives could take as many as nine of the seats with only five going to the Liberals and perhaps one to the Social Credit party.

Losses on that scale by the Liberals would be interpreted as a vote of lack of confidence in Mr. Trudeau's leadership by the Canadian electorate. It would also lead to increasing demands within the Liberal caucus for a leadership convention before the general election late next summer.

Mr. Trudeau, 59 on Wednesday, insists he will stay on to lead his Liberal party into the general election. His 5-year mandate expires in July, 1979.

Mr. Trudeau wants to continue as Prime Minister until Quebec decides its future relationship with the Canadian confederation.

The Liberals will retain their majority in the 264-seat House of Commons even if they lose all 15 constituencies. But severe Government losses would give Trudeau's opponents a strong psychological boost in the final months leading up to the general election.

Conservatives under their leader Joe Clark, 39, are confident they will make large gains in the by-elections and hope to win 10 seats. Ed Broadbent, 41, leader of the New Democratic Party is also optimistic. The 15 constituencies range from Newfoundland on the east coast to British Columbia on the west. There are seven in Ontario where all parties are agreed the next general election will be won or lost.

Volkswagen strike ends

NEW STANTON, Oct. 16.

A WEEK-LONG STRIKE by workers at Volkswagen's only U.S. production plant ended today as many members of the United Auto Workers Union returned to their jobs.

"The workers are back in good numbers and production has resumed," said a VW spokesman at the plant, which assembles about 300 cars a day.

The 1,800 members of UAW's local branch walked out last Monday. The strike was unofficial.

On Saturday, the rank-and-file organised a vote in which 650 workers opted to return to work today, 390 voted to stay on strike, and about 700 did not cast ballots.

Pending the return to work, UAW international representative Harry Davis and other UAW bargainers were to resume talks over the Union's first contract with the German carmaker. Wages remain the key point of difference.

The walkout began after local UAW members voted 1,235 to five to reject an offer that would have provided a minimum hourly wage of $9.62 by 1981.

The workers are now paid an average of $5.50 an hour, which would have immediately been increased to $6.60 under the rejected deal.

AP

Syria spurns U.S. hopes for peace treaty support

BY ROGER MATTHEWS

DAMASCUS, Oct. 16.

PRESIDENT CARTER was "dreaming" if he thought that Syrian opposition to the Camp David Midle East peace accords would dissipate as a result of Egypt and Israel signing a peace treaty. In the first official Syrian response to the U.S. President's statement on Friday that the bilateral agreement could open the door to wider negotiations, Information Minister Ahmad Iskandar retorted in an interview today: "This is wishful thinking by President Carter. He knows in his heart of hearts that Camp David will not serve the cause of a just and lasting peace in the area.

"The Americans are betting on President Sadat of Egypt as a person. But not even some of Sadat's closest aides could accept his policy. Once Sadat has gone no-one in Egypt will continue his policy. Not even his Vice-President Hosny Mubarak. By playing this dirty role Sadat has betrayed his own people and he has done so without consulting anyone."

Mr. Iskandar revealed that Syria would be bringing to the attention of other Arab nations a resolution of the 22-member Arab League providing for the dismissal from the organisation of any country that negotiated "any separate political, military or economic agreement with Israel."

At the summit meeting of Arab states, scheduled for Baghdad on November 2, Syria would be concentrating on the provisions of the Arab League Charter. And Mr. Iskandar pointed particularly to a resolution of April 1950 which stated that if a country signed a separate deal with Israel then not only should it be removed from the League, but also all direct or indirect monetary links would be severed.

The Minister insisted, however, that Syria was not rejecting peace, which it sincerely desired, but that it was convinced that the Camp David agreements were not the way to achieve it. "The three-card trick that Carter, Begin and Sadat are playing will not lead to peace but will push it further away," he said.

Mr. Iskandar added that it was possible that there would be talks between Syria and Iraq before the Baghdad summit in order to discuss the long-running dispute between the two countries."

Sarkis calls for decision

BY IHSAN HIJAZI

BEIRUT, Oct. 16.

A CLOUD of black smoke hung over Beirut today as a reminder to Arab Ministers and officials who have been meeting since yesterday at the mountain resort of Beiteddin, 20 miles away, to find a way out of the Lebanese impasse.

A brief artillery exchange between Syrian troops and Christian Militia last night at Karantina at the north-eastern entrance to the capital set an oil storage tank on fire. Each side accused the other of violating the truce.

According to Press reports, 30 people have been killed by sniping since the latest truce went into effect nine days ago. Roads leading in and out of the capital and between Christian east Beirut and Moslem west Beirut remain unsafe.

Tension spread northward when militia supporting former President Suleiman Franjieh kidnapped 15 people in Al Batroun district. Voice of Lebanon, the Phalangist radio, said two of the abducted men had been found dead, one of them decapitated.

President Elias Sarkis is reported to be pressing the representatives of Saudi Arabia, Syria, Kuwait, the United Arab Emirates, Qatar and Sudan to speed up their deliberations.

James Buxton reports: Sanaa, capital of North Yemen, was reported quiet yesterday after the crushing on Sunday of an attempted coup against President Ali Abdullah al-Saleh. There are no details of casualties but Sanaa radio said the conspirators would be tried by court-martial.

Soviet steel assistance for India

By K. K. Sharma

NEW DELHI, Oct. 16

JUST A fortnight before India's Foreign Minister makes his first visit to China in 18 years, the Soviet Union has announced extensive new aid to India. Russia will help build a new 3m-tonne steel plant at Vishakpatnam, Andhra State, a major 300,000 tonne alumina plant to exploit the huge bauxite reserves along the eastern coast and has assured India of immediate and long-term supplies of badly-needed coking coal.

The new steel plant will eventually raise India's production capacity to nearly 15m tonnes although it will initially enable the country to produce 9m tonnes within 2 years. More importantly, if the coking coal supplies come early enough, they can prevent the entire Indian steel industry from grinding to a halt.

The steel industry is threatened with closure as a result of flooding of coking coal mines in west Bengal and Bihar.

Chris Sherwell reports from Islamabad: In another move against the Pakistan People's Party, the military government today ordered the effective censorship of eight newspapers known to be sympathetic to the party's leader, the former Prime Minister Mr. Bhutto.

The government's action marks a continuation of its recent hard line against the party as Mr. Bhutto's appeal against the death sentence moves slowly towards a climax.

The newspapers affected include the official Pakistan People's Party newspaper, Musawaat.

Army show of strength as Iran mourns

BY ANDREW WHITLEY

TEHRAN, Oct. 16.

IRAN'S martial law authorities today mounted a massive show of strength in the capital and major provincial cities in anticipation of violence that did not come.

It was a day of national mourning for the hundreds shot down by troops in Jaleh Square, Tehran last month, on the first day of martial law. The call by religious leaders and opposition parties for Iranians to stay at home, close their shops and attend mourning ceremonies at mosques was highly successful.

But the virtual absence of bloodshed on a critical day for the authorities has also enhanced Mr. Sharif-Emami's prospects of staying in office as Prime Minister until next summer's general elections. Emphasising the theme of reconciliation and moderation, two Government Ministers today issued statements in sympathy with the mourning day.

In retrospect, the army appears to have over-estimated the extent of the threat from demonstrations. Over 2,000 troops were deployed throughout the sprawling capital and its suburbs. Armoured personnel carriers and machine-guns mounted on trucks guarded many squares.

Periodically throughout the day, long convoys of army trucks packed with soldiers, and led by armoured personnel carriers or British-supplied Scorpion light tanks, wound slowly through the modern, business heart of Tehran.

The university district, the poorer regions of south-east Tehran and the suburb of Rey were particularly heavily guarded. But the only reports of violence have been of minor, scattered clashes, with the casualty figure unknown. A newspaper report that three people had died in a shooting incident in west Tehran was denied by the Government.

Tehran's main cemetery of Behesht Sabra was the scene of one demonstration. At its gate heavily armed troops searched all vehicles going in, presumably for weapons. Nearby half a dozen lorry loads of army rangers—professionals brought in to replace the conscripts who make up much of the army—waited in reserve.

The strike call was observed completely in the southern half of this city of 5m inhabitants, and closed most offices and shops in the business centre and in the north. But there was little tension in the city. Many Iranians appear to have become accustomed to these regular stoppages.

On the other hand, there are increasing signs of restlessness among the business community at both the political strikes and the pay strikes in key Government sectors.

All work has been stopped in the post office for 13 days. A strike by Customs officials is also in its second week.

Although several large Government departments agreed to go back to work at the end of last week, strike fever continues in the provinces and in the hospital service.

Incomplete reports from the provinces suggest that today's political strike was observed in nearly all towns. Demonstrations were reported in the western town of Zanjan and there are unconfirmed reports of several dead from police shooting in the south-western town of Dezful.

Hardly any institutes of higher education are open and there is a strong possibility that the academic year will be cancelled in some cases.

S. Africa power plant

BY RICHARD ROLFE

JOHANNESBURG, Oct. 16.

THE SOUTH AFRICAN Electricity Supply Commission (ESCOM), which runs the Republic's primarily coal-fired electricity system, is to construct a new 3,600 Mw coal-fired power station at a cost of R1.2bn.

The power station, to be known as Ilanga, follows the pattern set by the most recent projects, Matla and Duvha. It consists of six 600 Mw units, phased in over a period of five to six years, and will be fed by a giant colliery with an eventual output of about 10m tons of coal per year.

The Ilanga project was first announced in September, 1976, but the ensuing slowdown in the Republic's economy led to a postponement. The plan now calls for Ilanga to be phased in during 1986, when Matla and Duvha have reached capacity. ESCOM has called for tenders for coal supplies and will put out the tenders for the main plant, turbines and generators early in 1979.

In the past, UK firms have won large orders for comparable projects. GEC obtained an R100m contract for the supply of generating plant to Duvha, and MacAlpine's has carried out civil engineering work.

A final decision on the siting of Ilanga has yet to be taken, but it will almost certainly be in the Eastern Transvaal, near the existing power stations.

New Zealand flood chaos

BY DAI HAYWARD

WELLINGTON, Oct. 16.

NEW ZEALAND'S worst floods of the century, which have left thousands homeless in the south and caused damage estimated at $70m, have been declared a national disaster.

Flood waters bursting the banks of a dozen different rivers over several hundred square miles have flooded towns, and thousands of acres of farmland, inundated airports, washed out main railway lines, cut power and other services and washed away bridges.

Entire townships have been evacuated and thousands of sheep, lambs and cattle have drowned. The meat industry is among those put out of action by up to 5 ft of water.

Ma Taura, with a population of 3,000, is the largest town affected. Kelso and Balclutha were also badly hit.

No loss of life has been reported but several people have been plucked from rooftops and the Government has set up an emergency disaster fund.

● AP-DJ reports from Canberra: Australia's unemployment fell by 5,955 or 1.5 per cent to 382,661 in September from August, according to registrations with the Commonwealth Employment Service (CES).

The unemployed represented 6 per cent of the estimated labour force at the end of September, compared with 5.3 per cent in September last year. Unfilled job vacancies registered with the CES increased by 6.2 per cent to 19,182 in September.

ARAB INDUSTRIALISATION

Trying not to mix business and politics

BY ROGER MATTHEWS IN BEIRUT

ARAB REACTION to the outline peace agreements for the Middle East reached last month at Camp David and the subsequent changes among Egypt's top military commanders now seem to be having an effect on Arab efforts to establish their own multi-billion dollar armaments industry. This could have important repercussions for both Britain and France which have signed valuable contracts with the Arab Organisation for Industrialisation. The AOI was set up by Saudi Arabia, Egypt, Qatar and the United Arab Emirates in 1974 to provide the umbrella under which the armaments industry would develop.

The link between inter-Arab tensions and the AOI is not yet fully established but there are several pointers. First, Saudi Arabia has been deeply concerned by the Camp David agreement and might wish to review its range of financial support for Egypt if President Sadat insists on signing what would amount to a separate deal with Israel and becomes more isolated from the rest of the Arab world.

Second, Mr. Sadat last week sacked his military commander and Minister of War General Abdul Ghani Gamassy, who as one of the four-man higher committee of the AOI had played a major role in the development of the organisation and its purchasing decisions. The other three members of the higher committee are Prince Sultan Bin Abdel Aziz of Saudia Arabia, Sheikh Ahmed Bin Khalifa el Thani of Qatar, and Sheikh Khalifa Bin Zaid of the UAE.

Third, Mr. Sadat this week has effectively removed the executive head of the AOI, Mr. Ashraf Marwan, from his post by issuing a decree ending his secondment from the Egyptian Presidential Office. Mr. Marwan then resigned his job and was appointed an Ambassador at the Foreign Ministry, according to the semi-official Egyptian newspaper Al-Ahram. Another Cairo newspaper Al Akhbar said Mr. Marwan had been demoted because of accusations relating to corruption and abuse of power.

AOI is the most impressive inter-Arab industrial venture of recent years and its elegant headquarters in Cairo are the outward symbol of what has been a determined effort to cream off managerial talent from other industrial sectors. The four participating countries have equal shares in the organisation although Saudi Arabia, Qatar and the United Arab Emirates subscribed the initial $1.1bn capital while Egypt pledged to provide some industrial facilities and much of the skilled manpower.

So far four major deals have been negotiated covering jeeps, helicopters, anti-tank guided weapons and jet fighter aircraft. This highly-ambitious programme is understood to be in the process of being supplemented by agreements covering electronic equipment, air-to-air missiles, communications and guidance equipment.

Apart from the deal with American Motors of the U.S.—which has already led to the first of 12,000 jeeps rolling off the assembly line in Egypt—all other contracts have been signed with Britain and France. The initial British deal was signed last year between the Dynamics Group of British Aerospace and the AOI for the Assembly and then construction in Egypt of the Swingfire anti-tank guided weapon. The value of the contract is put at more than £40m and the venture is controlled by a joint company, Arab-British Dynamics, of which AOI has 70 per cent and British Aerospace 30 per cent. It is intended that the entire missile should eventually be manufactured in Egypt at a factory near Cairo and Swingfire is then likely to be mounted on an adapted version of the American Motors Jeep.

All subsequent deals have followed the same joint venture structure with separate companies overseeing each project. After Swingfire came agreement with Westland and Rolls-Royce for production of the Lynx twin-engined multi-purpose helicopter the value of which could eventually top £400m.

More than 200 of the Lynxes with Rolls-Royce Gem engines may be produced in Egypt, although it is understood that the first 20 would be shipped ready-built from Britain. Initial work is expected to start within four months in Egypt and the first locally assembled helicopter may be flying one year after that.

But the most controversial of the AOI contracts came last month when an agreement was initialled with the Dassault-Breguet company of France for the purchase and assembly of the Franco-German Alpha-jet trainer which can also be used in a low-level intercept and strike role. Some 14 planes will be delivered direct from France and it is envisaged that a further 150 will be assembled and part-constructed at Helwan, south of Cairo.

Opposition to the Alpha-jet within the AOI and part of the Egyptian airforce was concentrated on two factors. That the French aircraft was inferior to its main rival, the British Hawk, and that only a relatively small part of it would actually be manufactured in Egypt. The Alpha-jet did not help its case when three weeks ago it crashed during a demonstration flight near Cairo. The exact role played by President Sadat when he stopped in Paris on his way to the Camp David Summit is not clear, but it was thought a wise political decision to avoid relying too heavily on one country for armaments purchases and the French were also offering the much more sophisticated high level interceptor, the Mirage 2000, as part of the Alpha-jet deal. The overall value of the French deal has not been given but it could in time approach £1bn.

Not all work is, however, to take place in Egypt and the latest AOI project is understood to involve the production of surface-to-surface and air-to-air missiles in Saudi Arabia together with associated radar and control equipment.

But the most difficult tasks for AOI still seems to lie in acquiring the right level of middle management, of ensuring a new approach to "quality control" that is of critical importance when assembling jet aircraft. The one thing that the organisation has never appeared short of is cash, a disability so often faced in dealings with other industrial concerns in Egypt.

SAUDI ARABIA, the world's largest oil exporter, today slightly revalued the rial upward against the U.S. dollar, money market sources said. Reuter reported from Bahrain that the Saudi monetary agency told dealers that from today the selling price for the dollar would be 3.31 rials.

The previous price was 3.33 rials to the dollar. Today's revaluation means there has been a 3.8 per cent movement against the dollar since July 11. This has been done in eight small revaluations.

WORLD TRADE NEWS

Japan car talks start November 6

BY CHARLES SMITH TOKYO, Oct. 16.

THE Japan Automobile Manufacturers' Association (JAMA) has agreed to hold two days of talks with its British opposite number the Society of Motor Manufacturers and Traders (SMMT) at the beginning of next month, a JAMA spokesman said today.

The talks will start in London on November 6 and will be concerned with the prospects for Japanese car exports to the UK in 1979, although JAMA would certainly not agree that the purpose of the meeting is to negotiate a ceiling on Japanese car exports to the UK next year.

The SMMT has been trying to get JAMA's agreement to a meeting to discuss Japanese exports for several months but the Japanese Association failed to respond positively until very recently.

The reason for its change of heart appears to have been "persuasion" applied by the Ministry of International Trade and Industry in the aftermath of last month's talks between the Japanese and UK Governments on car exports.

At these talks the UK (in the person of the British Ambassador to Tokyo, Sir Michael Wilford, apparently asked MITI to use its influence with JAMA to have the SMMT invitation accepted.

In declining to enter into hard and fast agreements with the SMMT over the level of Japanese car exports, JAMA can take its stand on the legal position that such an arrangement would violate the terms of Japan's Anti-Monopoly Law.

The Anti-Monopoly Law, however, does not prevent the Ministry of International Trade and Industry from "ordering" Japanese car manufacturers to restrain their export to the UK to certain levels. This is what MITI has been doing since last April in response to pressures from the British Government.

It is possible, though not certain, that once JAMA and the SMMT have met, the UK may again approach MITI for an undertaking to restrain car exports. Action of this kind risks infringing the rules of the EEC which make trade negotiations with third countries the preserve of the EEC Commission, not of member Governments.

However, if the British Government approaches MITI after talks have been held at industry-to-industry level it can always claim to be doing so in order to "clarify" the industry talks, not with a view to conducting independent negotiations.

The short-term situation with regard to Japanese car exports to Britain is that shipments are being cut back drastically in October in response to British demands for "firm evidence" of Japan's intention to keep its 1978 shipments at or below 1977 levels.

Japanese car manufacturers are believed to be under instructions from MITI to continue holding down shipments during the first part of next month as well.

Tokyo says EEC trade deficit is down

BY GUY DE JONQUIERES, COMMON MARKET CORRESPONDENT LUXEMBOURG, Oct. 16.

A SHARP reduction in Japan's trade surplus with the EEC, measured in yen terms, took place during the first eight months of this year, according to figures furnished to the European Commission by the Japanese government.

The statistics show that the value of Japanese exports to the EEC fell by 4 per cent, compared with the first eight months of last year, to Y1.507bn (£403bn), while imports from the EEC rose 12 per cent to Y848bn. Japan's resulting surplus fell 18 per cent over the period to Y658bn.

This apparent improvement contrasts strongly with a continued rise in Japan's trade surplus with the U.S., which is said to have increased by 47 per cent to Y1.495bn. Japan's global surplus grew even faster to Y2.572bn, a rise of 127 per cent.

In dollar terms, however, the Japanese trade surplus with the EEC showed a small increase of 2 per cent, to almost $8bn. The increases in Japan's trade surplus with the U.S. and the world as a whole were even bigger when measured on this basis, amounting to 80 per cent and 277 per cent respectively.

Experts at the European Commission, which will report formally on the statistics to EEC Foreign Ministers here tomorrow, are puzzled by the exact reasons for the difference in trade performance between the U.S. and the EEC. It is ascribed partly to the fact that a much higher proportion of U.S. exports is in raw materials, in which trade has recently been slow.

Commission officials have tentatively concluded that the statistics reflect a change in the terms of EEC-Japan trade resulting from the strong appreciation of the yen over the past year. The appreciation against the dollar during the year to September was 42 per cent, and 25 per cent on a trade-weighted basis against all currencies.

However, it is not yet clear how much of the reduction in the trade surplus with the EEC was due to Japanese administrative controls on exports.

The Commission is cautious about assessing the outlook for the trade balance and are sceptical whether Japan will be able to meet its latest official forecasts, calling for a 6-to-7 per cent drop in global exports and a 9 per cent rise in imports during the current fiscal year.

Assuming that the yen-dollar rate remains stable, these forecasts envisage an overall current account surplus during this fiscal year of Y2.7bn. This figure also assumes that the $4bn emergency import programme is fully carried out.

The Japanese Government has apparently declined to forecast future trends in trade with the EEC. But Commission officials believe that a further reduction in Japan's bilateral trade surplus with the community should be possible during the second half of this fiscal year.

But beyond that, the Commission believes that the EEC will face increasingly sharp competition on the Japanese market from U.S. exporters as the recent rise in the value of the yen against the dollar takes effect.

U.S. official on export credit visit

By Our Own Correspondent

WASHINGTON, Oct. 16.

A SENIOR U.S. Treasury official today began a week of talks in Europe designed to head off the threat of an "export credits war."

Mr. C. Fred Bergsten, the assistant secretary for international affairs, began his visit in Bonn today and will be also conferring in Paris, Brussels and London in advance of the annual OECD review of export credits due to be held in Paris on Monday of next week.

Mr. Bergsten will also take the opportunity on his trip to discuss international investment policies

Specifically, the U.S. wants to see a tightening of the existing arrangements, particularly in so far as the level of interest rates is concerned, with the U.S. preferring that rates be higher than they generally are at present.

The U.S. is also anxious to discuss the more universal application of rules governing export credits. Some European officials are known to suspect that this reflects U.S. concern that other countries are starting to challenge traditional American dominance of certain markets—such as civil aviation.

The U.S. has made no secret of the fact that it dislikes what it considers to be the unfair financing edge granted projects such as the European Airbus. But it also makes the point that there are other areas, such as shipbuilding, where the U.S. enjoys no market domination and where export credit rules do not apply.

Carter seeks to nullify Congress stand on duties

BY JUREK MARTIN WASHINGTON, Oct. 16.

THE CARTER Administration was today seeking ways of nullifying two items of yesterday's Congressional action which threaten to complicate the multinational trade negotiations in Geneva.

The most serious of these is the failure by Congress to extend the President's authority to waive the imposition of countervailing duties on imports beyond its scheduled expiration on January 3rd next year. A clause granting a temporary extension to February 15 was tacked on to the sugar bill, which passed the Senate but narrowly lost in the House.

Mr. Robert Strauss, the special trade representative and Mr. Michael Blumenthal, the Treasury Secretary, were conferring today to see if there were administrative ways round this problem. This is a complex legal area and officials were loathe to speculate on what device might be found that would both serve its purpose and not contravene the laws of the land.

The Administration is absolutely confident that when Congress reconvenes in January, it will be easy to secure the necessary extension. It was pointed out today that both Houses had approved the proposal in principle at various times during the last legislative session.

Approximately $100m worth of EEC-processed food exports to the U.S. could be subject to the imposition of U.S. countervailing duties because of subsidies paid under the Common Agricultural Policy.

The second issue is the congressional vote to exclude textiles from the Geneva trade negotiations. The Administration had argued that if this were done to serve American textile interests other countries with similar problems with domestic industries would seek similar exclusions, thus severely weakening whatever trade agreement is finally reached.

But the textile exclusion, sponsored by Senator Hollings of South Carolina, in the end passed Congress as an amendment to what is known as the "Carson City Coinage Bill" covering the issue of silver dollars. This is a minor piece of legislation which President Carter could veto with impunity, or simply not sign at all, in which case the bill would die.

The Administration was much more concerned that the textile clause was going to be tacked on to the Export-Import Bank Bill, providing a $40bn five-year financing of the agency, which is central to Mr. Carter's hopes of boosting U.S. exports. Had that happened, as appeared likely in the final chaotic days of the 95th Congress, Mr. Carter would have been faced with a very difficult decision.

Senator Hollings retains hopes that Mr. Carter will in the end back the textile exclusion clause. He conferred with the President yesterday, and his staff said this morning that a further meeting was planned either for later this week or early next. Mr. Hollings is a valuable political ally of the President, and the weight of his arguments is likely to be appreciated by the White House.

But U.S. trade officials today appeared confident that the President would not succumb to this pressure.

UNCTAD report accuses tobacco multinationals

BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT

AN OFFICIAL UN report has accused the seven major tobacco multinational companies who dominate the industry world-wide of large-scale bribery, price collusion, and deliberate concealment of financial information.

The report also gives comprehensive details of the Mafia's illegal operations in the U.S., and warns of a Mafia bid to penetrate the tobacco companies through legitimate stock acquisitions.

The report's findings are likely to increase the pressure for Third World countries—who produce more than half the world's supply of leaf tobacco—to try to curb the power of the tobacco multinationals.

The UN report is called the "Marketing and Distribution of Tobacco" and was prepared by the secretariat of the standing UN Conference on Trade and Development (UNCTAD based in Geneva.

One of its main findings is the extent to which the seven major tobacco multinationals dominate the world market. The seven companies are: British American Tobacco, the Imperial Group, Philip Morris, R. J. Reynolds, Gulf and Western, the Rupert, Rembrandt, Rothmans group, and American Brands.

Their direct operations, some 39 per cent of the market is an under-estimate of their effective control of the market through dominance of particular brands, the report says. To maintain their dominance the tobacco multinationals spend some $1.8bn on advertising.

The report states that "another component of world tobacco marketing is global corporate bribery or the 'pay-off' complex involving millions of dollars." It says that only a small fraction of these pay-offs have been uncovered in recent years, and these have mainly been in the U.S. due to the "increasing rigour of the investigative activities of the U.S. Securities and Exchange Commission." The report does not provide evidence of improper payments other than those which have already been disclosed in the U.S.

"Invariably all the tobacco conglomerates, as most other corporations, have received a bonus from the 'pay-off complex' by computing their profits on the basis of total costs, which are simply inflated to include bribes," the report adds.

The failure to uncover such bribery, says the report, is due to "the absence of rigorous public accountability of their corporate practices." It argues that "deliberate withholding of information is seen in both developing and developed countries" and suggests that such "data concealment is assisted by the giant accounting firms acting in alliance with corporate power."

Yet the report sees a challenge to the tobacco multinationals' power from the Mafia. It estimates that the Mafia's annual "profits" of about $100m from "cigarette bootlegging" represents some 3 per cent of their total $25bn annual "profits." The bulk of net income comes from "loan-sharking" and gambling, followed by narcotics, pornography and prostitution, and hijacking.

The report estimates also that both the legal and racketeering operations of the Mafia in the U.S. tobacco market covers just over a quarter of the total market.

W. German investment up

BY ADRIAN DICKS BONN, Oct. 16.

DIRECT private investment abroad by West German business and industry is now running at over twice the level of foreign private investment in West Germany, according to figures published by the Economics Ministry here.

During the first half of this year, West German private investment abroad was worth DM2.7bn (£715.23m), up DM200m from 1977, while foreign investment in the other direction was worth only DM 1.3bn — nearly DM 200m less than for the first half of last year.

On a cumulative basis, too, West Germany is a growing net exporter of capital, with investments in other countries worth DM 54.8bn, now well ahead of foreign investments in West Germany that now total DM 50.5bn.

The first half figures show little change in the preferences of West German investors. The U.S., which was the object of DM 723m of new investment, was the single most desirable country for West German investors, followed by France (DM 313m), Belgium / Luxembourg (DM 272m), Switzerland (DM 268m), Canada (DM 236m) and Brazil (DM 176m).

The United Kingdom attracted only DM 83m worth of German investment.

Between them, Western Europe and America accounted for 92 per cent. The chemical industry was the leading investor, followed by the banks, mechanical engineering, insurance, motors, oil and gas and steel companies.

Malaysia tightens rules

BY WONG SULONG KUALA LUMPUR, Oct. 16.

THE MALAYSIAN Government has announced that fully-owned foreign companies will be excluded from tendering for government contracts from next year, unless they take in local partners. Currently most of the Malaysian Government purchases of foreign goods and large contracts are done through local companies, wholly-owned by foreigners.

The Secretary General of the Malaysian Treasury, Mr. Tan Sri Abdullah Ayub said that from next year, only companies with "reasonable local equity and a minimum 30 per cent Malay shareholding" will be allowed to tender for Government contracts. He said this was to encourage local participation in foreign companies which are currently doing business with the Government.

Mr. Ayub said there has been an appreciable increase in foreign purchases by the Malaysian Government in recent years, adding that this trend was expected to continue in view of growing public sector expenditure and development.

Foreign companies here say the move was not surprising. In recent months some of them, particularly those tendering for government contracts for vehicles, defence equipment and construction projects, have taken in local partners.

Poland wants more exports to UK

BY ANTHONY ROBINSON

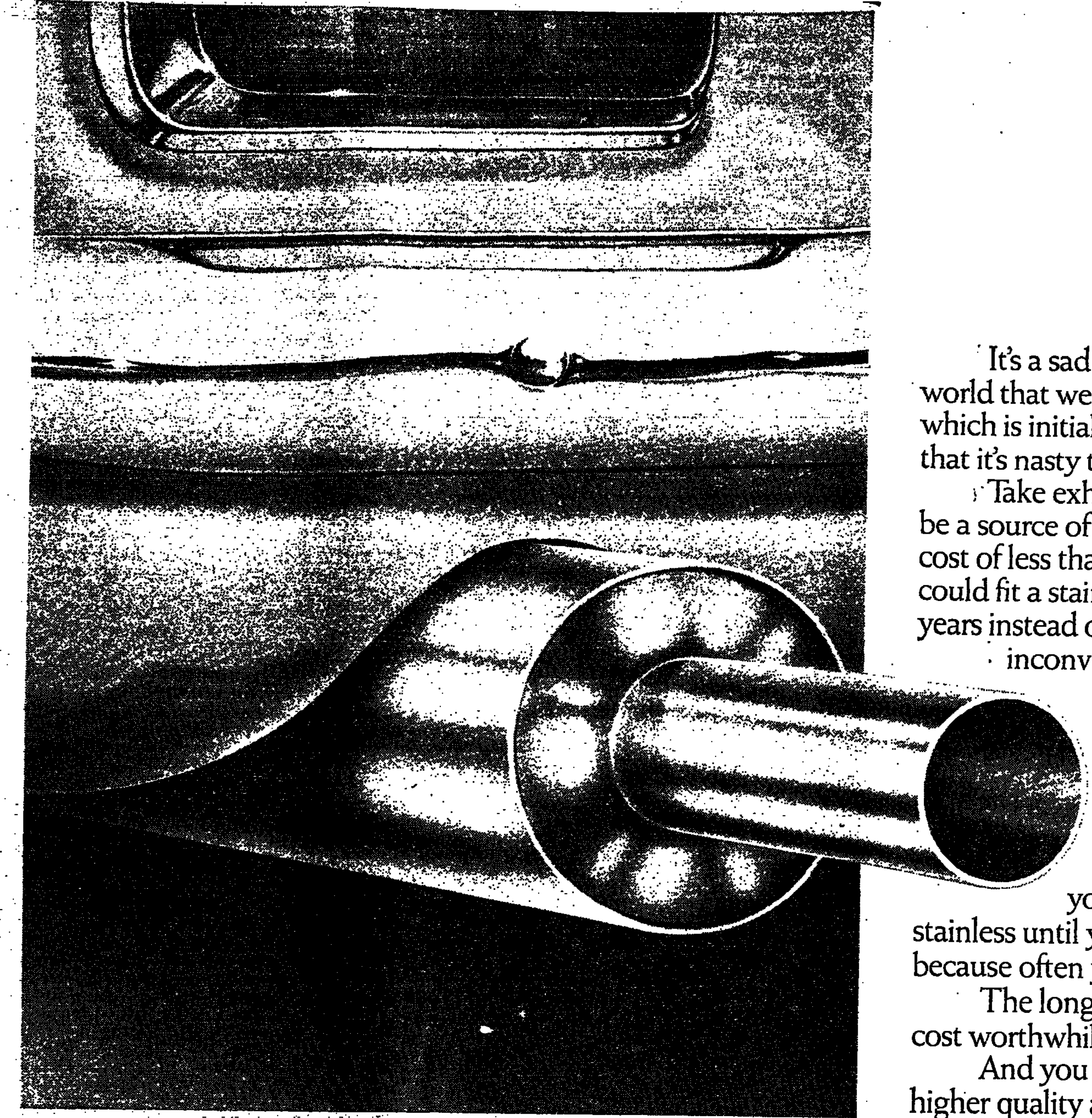
MR. STANISLAW DLUGOSZ, the Polish Deputy Foreign Trade Minister, told British delegates to the Anglo-Polish Joint Economic Commission in Warsaw that Britain would have to increase imports of Polish goods as a precondition for increased trade between the two countries.

British exports are currently at a relatively high level, due mainly to plant and machinery exports for major projects like the Wloclawek PVC complex and the Massey Ferguson Perkins Ursus tractor plant development.

Such exports are not amenable to the kind of restrictions which the Polish authorities have applied on a wide range of less-essential hard currency imports recently in an attempt to reduce the Polish trade deficit.

According to the Department of Trade the UK surplus in bilateral trade over the first eight months amounted to £34.4m although Polish statistics, which include purchases through London Commodity markets, put the Polish deficit at £129m over the first seven months.

Mr. William Knighton, Deputy Secretary for Trade, and leader of the 13-man UK delegation of officials and businessmen, said that British firms were increasingly seeking outlets for Polish goods.



It's doomed to non-stop grit, filth, boiling gases and scalding acids. Why doesn't it care?

It's a sad reflection on this modern throw-away world that we are too often prepared to buy something which is initially cheap, only to find before very long that it's nasty too.

Take exhaust systems. As you may know, they can be a source of trouble and expense. Now, for an extra cost of less than £10 on a £5,000 model, car makers could fit a stainless steel exhaust which would last five years instead of two. Think of the savings in money, inconvenience and blood-pressure this would bring.

So if you are involved in designing with steel or aluminium, brass, or copper, think again about stainless.

Of course, it can cost more initially. And by increasing the materials content, you push up your price. But don't dismiss stainless until you've done your sums right through, because often you'll find two things.

The longer life of the product makes the added cost worthwhile.

And you gain the two extra selling points of higher quality and cheaper maintenance.

Yes, think again about stainless. Find out the current facts about our range of thirty different types. And remember, our back-up service is always at your service, particularly in matching the performance of our steels to your exact needs.

Write to Mike Whitecross,
BSC Stainless Marketing, PO Box 150, Sheffield S9 1TQ.

The cost of corrosion The Hoar Report* estimates Britain's losses from corrosion as costing us a horrifying three-and-a-half thousand million pounds.

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Nationalised industry proposals criticised

BY JOHN HUNT, PARLIAMENTARY CORRESPONDENT

GOVERNMENT proposals for the reorganisation of the nationalised industries, set out in a White Paper published in April, have run into opposition from Boards in the public sector.

The White Paper recommendations were based on an original report from the National Economic Development Office. One of the main proposals, which the Government accepted, was that Secretaries of State and Ministers should have the power to issue specific directions to the nationalised Boards rather than the present ones "of a general character."

The Government suggested in the White Paper that in some industries a civil servant from the sponsoring department, and sometimes from the Treasury, should be appointed to the Boards after consultation with the chairmen concerned.

These proposals are criticised in observations on the White Paper from nationalised industry Boards, which were published yesterday by the Commons Select Committee on nationalised industries.

NEDO also called for a radical change in institutional arrangements. It suggested that each nationalised industry should be run by a policy council responsible for strategy, and a corporation Board acting as the executive authority.

The policy council would include corporation Board members and representatives of Government departments, the trade unions and consumers.

This approach was rejected by the Government, but some of the nationalised industries think it might work under the right circumstances.

The British Gas Corporation says in its submission that it is opposed to government intervention in the day-to-day management of the industry and particularly to powers to issue specific directions.

If such powers were given it believes legislation should give the Corporation the right to provide a full report to Parliament on matters dealt with in any specific direction.

Nationalised industries, should have the right to ask for a direction in specific cases rather than being asked to implement the Government's wishes.

It would not object to a civil servant from the Department of Energy being a part-time member of its board, provided he was ready to take full collective responsibility for the Corporation's decisions. It warns, that if as a result there were a serious conflict of interest it would be damaging to relations between the industry and its sponsoring department.

It was pleased that the Government had rejected policy councils on the grounds that it would slow down decision making and confuse responsibility.

But British Aerospace says the idea of a policy board was dismissed too readily by the Government. It believed that it would be worthwhile considering the idea further so long as the sponsoring department were reduced in size and the sponsoring board were not an addition to the existing two-tier structure.

British Airways says that it would prefer powers of specific direction not to be introduced.

British Railways Board agrees with the rejection of policy councils.

Tories would give fishing priority

By Richard Evans, Lobby Editor

AN INCOMING Conservative Government would give top priority to negotiating a satisfactory Common Market deal for Britain's hard pressed fishing industry, Mrs. Margaret Thatcher, leader of the Opposition, promised last night.

In a message to the electorate of Berwick and East Lothian, where there is a by-election on Thursday week, Mrs. Thatcher said that a Tory administration would be no less tough in negotiations with Britain's Common Market partners than the Labour Government.

Indeed, they would have a greater chance of success because of their more co-operative and less obstructive attitude to EEC affairs in general.

The tone of her message shows how nervous Conservative leaders are at the impact being made on the fishing industry by Mr. John Silkin, Minister of Agriculture and Fisheries, from his tough negotiating posture.

Message

Mrs. Thatcher is to meet representatives of the fishing industry at the Commons early in the new session in a move designed to assure fishing interests that the Tories would not sell them out as part of a Common Market bargain.

Her message to the Tory candidate at Berwick, Miss Margaret Marshall, said that there could be no doubt of the Conservative Party's determination to support to the full the interests of British fishermen.

"At stake are the livelihoods of thousands of people both at sea and ashore, as well as a vital national food reserve. Fishermen will not find the Conservative Party wanting. The fisheries issue will be given top priority in our negotiations in Europe when we return to office."

Time was not on Britain's side. While negotiations dragged on in Brussels, over-fishing continued. "If we cannot obtain early agreement from our European partners, it will be necessary to bring in further conservation methods, hopefully in unison with Brussels but if necessary unilaterally."

Marginal oilfields face tax net

BY OUR ENERGY CORRESPONDENT

MANY North Sea oilfields regarded as only marginal commercial prospects will become liable to pay Petroleum Revenue Tax if higher rates proposed by the Government are implemented next year.

According to a report prepared by the Department of Political Economy at Aberdeen University, the higher rates of PRT would reduce the profitability of many fields.

The study, by Mr. Alexander Kemp and Mr. David Crichton, says that it is difficult to see what effects the new tax system would have on the pace of development in the North Sea as a whole.

"Prospective returns to smaller fields are certainly reduced. Whether this stops or postpones the exploitation of such fields depends on the minimum acceptable return to operating companies.

"It is clear that the amount of funds becoming available to oil companies from their current operations in the North Sea will be significantly reduced by the proposed changes."

The availability of internally generated funds might have a big influence on future investments in the North Sea. In addition the relative attractiveness of opportunities in other offshore areas of the world could be a big factor in deciding where future investment would go.

The present system of oilfield taxation was far from satisfactory, but it was difficult to make radical improvements to a method that had been in operation since 1975.

The report shows how the new rates of PRT will affect the financial performance of a number of fields over the lifetime of production.

The total tax bill as a percentage of resources generated for Shell/Esso's Dunlin Field, for example, would go up from 70.9 per cent to 75.4 per cent. For BP's Forties Field it would go up from 73.6 per cent to 77.2 per cent. Occidental's Piper Field from 71 per cent to 75 per cent, Union Oils' Heather Field from 62.2 per cent to 63.4 per cent, and Conoco's Murchison Field from 64.9 per cent to 66.3 per cent.

Several oil company chiefs have accused the Government in recent weeks of severely eroding oil industry confidence in the North Sea by bringing forward the increase in PRT. Future projects would have to be seriously re-examined, they said.

A Review of the Proposed Changes in North Sea Taxation. Department of Political Economy, Aberdeen University. £5.00.

Indices 'accepted as yardstick'

BY ERIC SHORT

THE NEW FT-Actuaries Gilt Indices have become accepted as the universal yardstick for measuring the performance of UK gilt-edged portfolios, it was emphasised in a paper presented last night to the Faculty of Actuaries meeting in Edinburgh.

Mr. George Dobbie and Mr. David Wilkie said that the old method of calculation of the 20-year index, based on only six stocks, had shown a very limited picture of the gilt-edged market.

Now, by basing both the price and yield indices on all the stocks quoted on the gilt market, with the exception of the variable interest stocks, a complete picture of that market could be presented.

The authors discussed how the price indices should be used to measure performance and presented a comprehensive series of tables, using both a nil tax rate applicable to pension funds and a 37½ per cent rate applicable to life assurance funds.

They showed that the division of the indices into short, medium, long and irredeemable, enabled fund managers to compare sectors of the gilt market with the market as a whole.

ERF to spend £10m more on truck output

Financial Times Reporter

ERF, one of the few UK independent truck manufacturers, is to spend £10m to double production over the next five years.

The programme includes a new production facility at Wrexham which it says should create more than 1,000 jobs.

The present manufacturing base, 30 miles away at Sandbach, Cheshire, has no further room for expansion, but will remain the company's main base and headquarters.

ERF's output is 3,500 trucks a year, 90 per cent of which are sold in the UK. Mr. Peter Foden, chairman, believes that in the short-to-medium term the company's main thrust must continue to be in the home market.

He is concerned about foreign vehicle penetration at the heavy end of the UK market, a trend which British manufacturers are having some difficulty to contain.

Midway through this year, for example, ERF had won 12.3 per cent of the U.K. market for extra heavy duty trucks (over 28 tons). But Volvo of Sweden was market leader with 2? per cent.

Tolkien letter fetches £480

SALEROOM

BY ANTONY THORNCROFT

SOTHEBY'S yesterday held two small but interesting sales, disposing of autograph letters for £35,992 and objects of vertu for £39,232. The top price among the letters was the £900 for a collection of 30 letters from George Viscount Townshend, Lord Lieutenant of Ireland, about the state of that country in the late 18th century.

More interesting were prices of £480 for a letter by Tolkien to Naomi Mitchison announcing the completion of The Lord of the Rings and The Silmarillion, and £280 for some letters by P. G. Wodehouse explaining the origin of the name "Jeeves."

Among the objects of vertu, a rectangular Swiss gold and enamel snuff box of the early 18th century sold for £1,100; a French gold snuff box of 1773 for £1,050; and Leggatt and Sons gave £100 for a silhouette of George, First Earl of Onslow by John Field, on behalf of the National Portrait Gallery.

Christie's disposed of coins for £68,280, with a very good top price of £8,000 for a rare Royal Guelphic Order, which had been awarded to Sir Jonathan Waller in 1832. Some even rarer 12-rouble pieces, minted in platinum in 1830 and 1831, also attracted exceptional prices, going for £3,500 and £2,450 respectively.

The painting, "The Winnower," by the 19th-century French artist Jean-Francois Millet, which was bought at Sotheby Parke Bernet in New York on Friday for £304,000 by the National Gallery, is to go on public display as soon as possible. An anonymous group of benefactors helped with the purchase.

It was the first time that the National Gallery had bid at a U.S. public auction. The Gallery said that the picture was a "significant addition" to its collection. Its only other work by Millet is a small painting entitled "The Whisper."

Christie's first Saturday sale at South End House, Twickenham, consisted of a collection of English furniture and a small amount of porcelain and pictures.

The most expensive item was a William and Mary oyster veneered walnut chest of drawers which fetched £3,300 while a Queen Anne walnut bureau made £1,800 and a Queen Anne black lacquer cabinet £1,600.

Telegraph 'bleeding to death' says chairman

By Pauline Clark, Labour Staff

LORD HARTWELL, chairman and chief executive of the Daily Telegraph, yesterday warned that the newspaper was "in danger of bleeding to death" as a printers' stoppage prevented London editions from appearing for the 10th successive day.

In a letter to 3,000 staff, Lord Hartwell said that the Daily Telegraph company was the only Fleet Street newspaper which was not part of a large conglomerate. It had no other interests to come to its aid. If the stoppage continued, "the ship itself will sink. Bankruptcy will ensue. The time is not very long."

Lord Hartwell urged his staff to persuade the strikers that there was no money for ransom.

Talks between management and union officials representing 240 members of the National Graphical Association, broke down last week with disagreement over proposals to introduce official union representation in the newspapers' disputes procedure.

After 25 hours of talks failed to produce a solution on Thursday, the NGA chapel (union branch) declared that they would not meet again for a week.

The union, which made the dispute official a week ago, has resisted management efforts to include the NGA regional secretary in future talks over disputes between chapel and management.

Lord Hartwell said that for many months the management had got nowhere with in-house discussions to end the chaos in the composing room.

The dispute started when a small group of NGA members took action in support of a claim for more money to operate telephoto transmission equipment. Other members blacked copy that would normally have passed through the telephoto department, and then went on strike when management stopped their pay.

Shawcross deplores industrial disputes

By Maurice Samuelson

INDUSTRIAL DISPUTES in the Press and in the motor industry were deplored yesterday by Lord Shawcross, chairman of the Press Council.

Both industries had been bedevilled by labour trouble, and the recent strikes in the newspaper industry—except that at the Daily Telegraph—had been unofficial "and the result of sheer anarchy," he said.

In the motor industry, to ask for protection against foreign imports was a "counsel of despair." The UK could produce cars of a quality and at a price fully competitive with foreigners.

"All we need is the united determination to get on with the job," Lord Shawcross said at the Lucas Press Centre in the National Exhibition Centre, Birmingham, which was being used for the first time this week by visitors to the 1978 Motor Show.

Vehicle warning

THE DEPARTMENT of Transport yesterday warned operators of insulated and refrigerated transport in the international trade that French veterinary inspectors had been instructed to refuse entry to all vehicles not conforming to the requirements of the agreement on international carriage of perishable foodstuffs.

Ezra issues warning on danger to coal

BY DAVID FISHLOCK, SCIENCE EDITOR

THE BIGGEST danger to the future of the British coal industry lay in projecting demand for energy, depressed through world recession, Sir Derek Ezra, chairman of the National Coal Board, said yesterday.

It would be very serious indeed, if Britain was to fall into this trap, said Sir Derek, giving the annual Coal Science Lecture in London last night.

Sir Derek, in a joint lecture given with the directors of the Coal Board's two main research centres, argued the case for a major international collaboration to solve the industry's technical problems.

The Coal Board was spending all it could afford on research and development—£20m a year—and was now venturing into areas of development so long-term that it had to have Government assistance.

The Government had "made a good start" this year, in allocating £20m over five years towards the cost of constructing a series of large pilot plants. But it was much less than the U.S. Government was giving, over £250m a year on an industry with four times the UK coal output.

The Coal Board expected to launch the 18-month design study for two large pilot plants based on its new coal-conversion technology before the end of the year. It was also considering a bid for finance from a new EEC fund set up this summer.

In mining technology the Coal Board accepted that it must pay, even though the governments of other coal-mining nations—the U.S. and West Germany, for example — contributed heavily for development, too.

Sir Derek was assisted by Mr. Peter Tregelles, director of the Coal Board's Mining Research and Development Establishment and Dr. David Dainton, director of the Coal Research Establishment.

Mr. Tregelles heads a staff of more than 1,000, working on improved mining techniques. He dealt with progress towards remote and automated mining operations. Dr. Dainton outlined the work of his 500-strong research team on the new combustion, conversion and energy uses.

Jewellery turnover increases by 48%

FINANCIAL TIMES REPORTER

THE jewellery trade has emerged virtually unscathed from a three-year period in which incomes have been severely squeezed and value added tax at one time reached 25 per cent., according to a survey.

The latest ICC Business Ratio survey studied 99 leading companies from the retail, wholesaling and manufacturing industries as well as multiple functions and diamond merchants. In the three years to last October, total turnover rose by 48 per cent with the greatest increase in the final year, and profits increased by an average of 30 per cent.

It appeared, the report claims, that products of intrinsic and lasting value were attractive during times of economic activity.

Sales by retail jewellers had risen steadily in the mid-70s—albeit at a lower rate than inflation—while diamond sales were now running at record levels after a setback in 1974-75.

Diamond merchants were the biggest single contributor to jewellery exports which rose overall from £34m to £73m. The average proportion of exports to total turnover had risen from 16.3 per cent in 1974-75 to 23.1 per cent in the final year.

But this figure masked the true performance of the industry which had boosted business even more significantly. The tourist boom in the UK had increasingly provided an important slice of total sales, especially to London retailers.

In 1975-76, almost all sectors suffered a setback when value added tax rose from 8 to 25 per cent. A year later, however, the tax was reduced to 12½ per cent and the improved profitability that followed reflected better trading conditions.

Manufacturing jewellers, although still the most profitable sector, had suffered a steady fall in profitability over the three years.

Three years ago, they had a higher return on capital than the average for the trade, but now the gap had almost disappeared.

Return on capital dropped from 43.2 per cent in 1974-75 to 28.6 per cent compared with an all-company average decline from 31.2 per cent to 26.4 per cent in the same period.

But while the manufacturers were the most profitable sector in the report, diamond merchants would continue to be the fastest growing sector in the industry.

ICC Business Ratio report on the Jewellery Trade: £55.

Three Welsh companies loaned total of £¼m

FINANCIAL TIMES REPORTER

THREE NEW COMPANIES in West Wales are receiving investment loans from the Welsh Development Agency worth a total £250,000. The money will help create several hundred jobs, boost exports and build a factory.

The biggest investment loan goes to Interblock Masonry Units, of Guernsey, which has formed a company called Promason to make hollow concrete interlocking blocks which need no mortar or paint.

The £100,000 shares-and-loan deal aid from the development agency will be spent on machinery to produce an initial 960,000 blocks a year for the UK market.

"D" Coachbuilders, a newly-formed subsidiary of a coach-hire company in Swansea, has been given an £80,000 investment loan to build a 20,000 sq ft factory for van and lorry assembly. The company hopes to cut delivery time from two months to two weeks when the new factory is in operation.

The third investment goes to Hortex Chemicals, formed a year ago. The £70,000 loan will be spent on launching a new poison-free wood preservative in West Germany.

Since the Development Agency was set up in January, 1976, it has approved investments worth £10m for 115 businesses in Wales ranging from public companies to one-man concerns. The aim of the agency, funded by the Treasury, is to stimulate Welsh industry and to provide and sustain employment. Within the next three years, over 2,500 jobs will have been created.

Mortgage limit 'raised prices'

By Michael Cassell, Building Correspondent

ESTIMATES that average house prices had so far this year risen by about 20 per cent were likely to prove conservative, according to the Anglia, Hastings and Thanet Building Society.

Mr. John Porter, chairman of the society, formed through a merger three months ago, said yesterday that although he believed the housing market would become more stable, very substantial price increases had been occurring in some parts of the country.

Prices had been rising by between 20 per cent and 40 per cent during the first nine months of this year, with London, the Home Counties and the South-east registering the largest increases.

The scale of the rises was "unfortunate but inevitable" after a long period of relative price stability since 1973.

Mr. Porter added: "I believe that the Government's announced intention to contain prices by restricting the volume of mortgage finance has proved to be counter-productive.

"People have been encouraged to go out and buy when they might not otherwise have done so and the pressure of demand, coupled with the recent rise in real earnings, has pushed prices upwards."

The Anglia, Hastings and Thanet yesterday produced figures to demonstrate the way in which most home buyers have been able to accumulate capital because of appreciating property values.

According to a survey of the society's borrowers, home owners who bought their house 20 years ago at an average of just under £2,000 have accumulated an average capital asset of nearly £13,000.

Those who in 1974, paid the average price of just under £4,508 now have "built in" capital of over £12,500.

● The Alliance Building Society housing research unit said yesterday that although up to 75 per cent of all housebuyers became involved in a chain of purchasers and sellers, few experience any problems because of this factor.

A survey conducted by the Alliance shows that the time taken to exchange contracts for people in buying chains now takes an average 21 weeks. Exchange of contracts averages 10 weeks for all first-time purchasers and those not involved in chains.

Dunlop site industrial estate plan

By John Brennan

A £10m industrial estate is planned for 25 acres of surplus land by Dunlop Holdings' Fort Dunlop headquarters, near Birmingham.

Bryant-Samuel, the development company owned jointly by Bryant Holdings and the Samuel Properties, has won a tender to buy a 125-year lease on Dunlop's surplus land. The developer, backed by finance from Legal and General Assurance Society, plans to build 500,000 sq ft of industrial buildings on the land. At today's prices the development will cost £10m.

The land, close to Junction 5 of the M6, comes with planning permission for the ½m sq ft industrial estate. But Bryant-Samuel, which hopes to start construction work on a first, speculative phase in December, will gauge letting interest before going ahead with large-scale development.

Redundancy for Clyde workers

MORE THAN 100 workers at a ship repairing company on the Clyde coast at Greenock were told yesterday they are to be made redundant in 90 days.

The news was announced by Mr. A. Ross Belch, chairman and managing director of the recently nationalised Scott-Lithgow shipping group.

Between 120 and 130 workers with the Scott-Lithgow drydocks company are to lose their jobs while the rest of the workforce of 150 will be transferred to other jobs or retained for shipbuilding purposes.

Mr. Belch said the company had no alternative but to make part of the workforce redundant. He added the drydock was unprofitable and that ship repairing and shipbuilding had never been more depressed since the 1930s.

PLA plan to cut 1,400 jobs

BY IAN HARGREAVES, SHIPPING CORRESPONDENT

A DRAFT PLAN to cut 1,400 jobs in the Port of London within the next year was considered yesterday by a joint union-management committee.

The committee has two more meetings planned for this week, after which the scheme will go to a board meeting of the authority for approval next Monday.

Sir John Cuckney, chairman of the authority, said he now hoped it would be possible to put an acceptable plan to the board. He also praised the unions for their constructive approach in the weeks of negotiations which have already taken place.

Agreement on the plan is necessary by the end of the month. The Government will only then release the first slice of the £35m promised to the authority in August to help pay for restructuring the labour force.

Registered dockers' trade unions have already given broad assent to the loss of 1,400 jobs, but unions representing stevedores and staff have shown more resistance. This is a key area to be sorted out this week.

The jobs lost would be shared equally by staff and registered dockers, and would reduce the upper docks labour force by more than a quarter.

The PLA has compromised by not insisting on demanning targets beyond the first year of the plan, but the authority has made it clear that it wants to see more than 2,000 jobs go in the next two or three years.

Apart from the manpower issue, the draft plan lists seven areas of review: port charges; alternative job opportunities, the need for investment in the upper docks; trade union involvement in marketing; traffic forecasts and cost reductions.

Sir John said that without a Government-endorsed plan and access to the £35m grant, the PLA faced "a serious cash crisis which would require detailed and urgent discussions with the Government." But speculation about receivership and liquidation was premature.

Housing corporation seeks comments

BY MICHAEL CASSELL, BUILDING CORRESPONDENT

THE HOUSING Corporation is asking housing associations in England to comment on its proposals for funding them in the 1979-80 financial year.

Although the Department of the Environment is not expected to confirm the cash allocation available to the corporation until the end of 1978, it is being assumed that support will not be reduced and the corporation has said that it intends to allocate funds on much the same basis as in the current year.

This would again give the biggest share of resources for new building and rehabilitation to associations in London and the north west—enabling them to provide about 16,000 homes out of the England total of just over 31,000.

The corporation said: "The current year's programme is the culmination of three years' work to get priorities right and switch resources into inner city provision and housing for people with special needs.

"No loans will be made to any association until there has been the fullest examination of its capacity and capability. Every association will be subjected to a thorough assessment of past performance, present policies, and management committee capability and control, as well as methods of selecting tenants."

Local authorities are also being asked, between now and December, for their views on the corporation's priorities and strategies for the 1979-80 programme. The corporation will publish final allocations to both regions and individual associations in February.

Shoe orders up 4.9%

MANUFACTURERS' deliveries of footwear in the first seven months of this year were 6.1 per cent lower in volume than in the same period of last year, but orders during the first six months were up by 4.9 per cent over the comparable 1977 period, with orders for June alone 56 per cent higher.

British Footwear Manufacturers Federation statistics also show that exports in the first eight months of the year, in terms of volume, fell by 4.1 per cent, although up in value by 4.5 per cent.

The decline in imports is levelling off, with a drop in volume during the eight months of 12.7 per cent, against a year before.

HOME NEWS

Delivered milk price to rise by 1p a pint

BY CHRISTOPHER PARKES

THE PRICE of a pint of milk delivered to the doorstep would go up 1p to 13½p on November 5, Mr. John Silkin, Minister of Agriculture said in London yesterday.

But there would be no further increases until next autumn "short of actual disaster such as a drought or a Tory Government," the Minister promised.

Almost half the rise, 3.96p a gallon, will go to the dairies which distribute the milk. They have to recoup losses made earlier this year and cover cost rises over the next 12 months.

The Milk Marketing Boards will also take a small share. The balance will be shared by farmers whose costs for feed and other expenses increase during the winter.

The Ministry of Agriculture claimed that the increase would lead to a rise of 0.8 per cent in the food price index and add only 0.2 per cent to the retail price index.

Dairy farmers had been doing quite well recently, the Minister said. The price rise, however, would not push them into "the Rolls-Royce class." He suggested that in future, they might not be doing quite so well. "I am aiming to keep them steady. To keep them in the same car."

The price of milk was last raised in January. Mr. Silkin said that a price increase had been avoided for the longest time for five years.

The Ministry said that in spite of the increase, dairy farmers' prices this year would have risen only 4 to 5 per cent while their costs had gone up about 12 per cent.

The price of 13½p will apply to pasteurised milk. Homogenised, sterilised and ultra-heat treated milk will go up to 14p, while gold top, Channel Islands and South Devon milk will cost 15½p a pint.

The price rise will take effect in Scotland a month later—on December 3.

Mr. JOHN SILKIN
'No Rolls for farmers'

Further housing schemes 'unwise'

BY PAUL TAYLOR

THE HEALTH and Safety Executive has told the district council for the Canvey Island area in Essex, that it would be "prudent" not to approve further housing developments within one kilometre of some installations on the island.

Last night the Executive rejected suggestions that it had "banned" all new buildings in an area near the British Gas Corporation's methane plant and plants owned by Texaco and the London and Coastal company.

The Castle Point council had written to the Executive asking it for views on suggested housing developments in the area.

Last night the Executive said its reply was in keeping with the views of the lengthy investigation into possible hazards on Canvey Island published in June.

Sir Bernard Braine, Conservative MP for South-East Essex, yesterday said the Executive's comments were a "clear admission that the existing inhabitants of Canvey are at serious risk." More than 30,000 people live on Canvey Island, some of them within one kilometre of the installations.

COMPUTERS are being used by TI Accles and Pollock to test new designs for steel golf club shafts.

Professional golfer Hugh Lewis, is pictured at Belfry Golf Club in the Midlands, using a club fitted with strain gauges and accelerometers for the computer test. The company exports much of its equipment to Japan, U.S., South Africa and Commonwealth countries.

£3.5m aluminium deal

BRITISH ALUMINIUM has sold £3.5m of aluminium to China for delivery over the next three months.

Announcing the sale in Peking yesterday, Mr. Ronny Utiger, the company's managing director, said he could not specify the type or quantity of the aluminium, but said he hoped there would be further sales to the Chinese. Mr. Utiger is in China with a delegation of UK businessmen.

This is the first sale by British Aluminium to China since 1975.

Hopes rise in bid to salvage tanker

BY ROBIN REEVES

HOPES WERE rising last night that the complicated operation to try to save the crippled Greek tanker Christos Bitas and prevent massive oil pollution of the Welsh and Irish coasts would succeed. In spite of winds, gusting at times to Force 8, the pumping of oil from the damaged tanker into the 30,000-ton British Dragoon, moored alongside, was being stepped up.

Captain Ray Newbury, Department of Trade co-ordinator of the anti-pollution operation at sea, said that they were beginning to feel the results of the hard work were beginning to bear fruit. The 58,000-ton Christos Bitas struck rocks off the Pembrokeshire coast on Thursday afternoon.

She was in better condition last night than at any time since the salvors first boarded. "By this evening it could be a sound ship," said Captain Newbury.

He refused to speculate where the vessel might be towed. This would be up to the Department of Trade and would depend upon the tanker's condition.

The Christos Bitas was lashed securely to the British Dragoon and was being watched by the frigate Eskimo and a flotilla of detergent-spraying vessels.

Helped by a slow zig-zag tow up the Irish Sea, to maintain greater stability, it was possible to increase the oil transfer from the damaged tanker to a rate of up to 770 tons an hour.

By last night about 6,000 tons of the tanker's original 35,000 tons cargo had been offloaded—leaving 24-25,000 tons maximum still to go.

Cleaning up the estimated 4,000 tons originally lost when the Christos Bitas struck rocks near the Smalls Lighthouse was also proving successful.

Yesterday morning, there was real danger of a breakaway slick three miles off St. David's Head being blown on to the Pembroke National Park coastline of St Bride's Bay, but an all-day effort by 15 spraying vessels succeeded in disposing of the oil before it reached the shore.

By late afternoon, spraying vessels were reporting difficulty in finding oil patches to tackle. It was accepted, however, that the islands and rocks off the Pembrokeshire coast were heavily coated in oil with grave consequences for the colonies of sea birds and seals in one of the finest wild life sanctuaries in Europe.

Dyfed County Council and local district councils were standing by with up to 1,000 men to tackle the oil should any come ashore.

It is understood the Department of Trade has decided to tow the tanker into Milford Haven if salvage attempts succeed.

The Department is looking at plans to set up a permanent "dirty dock" in the UK to which striken tankers could be towed.

A decision on this issue, or on the general organisation of the Department's anti-pollution measures, is likely to be taken after the appointment of the new anti-pollution commander, promised by the Government following the Eleni V incident earlier this year. This appointment is expected shortly.

The Government may also consider introducing a shipping separation lane scheme in the Milford Haven area.

While it is unlikely that Ministers will support a call from Md. John Prescott, Labour MP for Hull East, for a compulsory pilotage scheme it is likely this incident will strengthen calls for statutory control of tankers in UK coastal waters.

A Department of Trade marine survey officer from Hull has begun investigations into the cause of the accident, and is expected to pay particular attention to the vessel's radar equipment.

● Waveney District Council in Suffolk yesterday disclosed that it is paying nearly £100 a day in interest charges on money borrowed to finance beach clearing after the Eleni V disaster in May.

The council's bill is about £350,000.

Occidental expects gas from Piper Field next month

BY KEVIN DONE, ENERGY CORRESPONDENT

NATURAL GAS is expected to start flowing next month from the Occidental group's Piper Field in the North Sea.

The gas will give an added boost to British Gas' supplies from the northern North Sea. It also represents the chief success so far for the Government's tougher policy of cutting down the wasteful flaring of associated gas.

The Occidental group, which includes Getty Oil, Allied Chemicals and the Thomson Organisation, was persuaded to invest in a $150m (£80m) gas conservation programme in return for permission to increase crude oil production from the Piper Field to 300,000 barrels a day.

The field is one of the most profitable yet developed in the North Sea.

Meanwhile, production from the group's nearby Claymore Field has received a surprising boost from the latest development well, which came on stream about three weeks ago. It is tapping a new part of the oil reservoir with a higher proportion of gas and is flowing at about 26,000 barrels of oil a day.

It has helped to push total Claymore production up to 110,000-120,000 barrels a day from 12 wells. This is equal to about 10 per cent of current UK production.

The field, which has estimated recoverable reserves of 404m barrels of oil, should reach a peak production rate of about 170,000-180,000 barrels day. It is already performing better than expected. Production has been helped by the unexpected discovery of additional gas in the reservoir.

The latest well makes Claymore production less dependent on the Piper Field, and it reduces the supplies of Piper gas needed for pressure injection to help lift the oil from the Claymore reservoir.

Supplies of natural gas from the Piper Field to British Gas will build up to a maximum of 90m cubic feet a day. Production should reach its peak in 1979-80.

It will be transmitted along a 35-mile spur line which joins the gas trunk line leading from the Frigg Field to St. Fergus in Aberdeenshire. Associated gas from Texaco's Tartan Field will also be transmitted along this route in the early 1980s.

The Piper Field gas recovery plan will also boost production of natural gas liquids. An additional 15m barrels of propane and 6m barrels of ethane-based NGL will be produced during the life of the field. Output of liquid propane will be doubled from 5,500 to 11,000 barrels a day.

The NGL has been bought by Norsk Hydro, the Norwegian chemicals group, for use at its chemical plants at Porsgrunn in southern Norway.

The Piper Field is 100 miles north-east of Aberdeen. It is being brought back into production this week after being closed for several days to instal the new gas equipment.

Truck sales surge benefits importers

BY KENNETH GOODING

COMMERCIAL VEHICLE sales in the UK continued at a high level last month—they were nearly 28 per cent above those for the same month a year ago—but importers were getting the main benefits.

Imported trucks accounted for 27 per cent of the September market, according to the figures from the Society of Motor Manufacturers and Traders. In September last year the comparable figure was just over 20 per cent.

During the first nine months of this year commercial vehicle registrations at 199,919 were just under 18 per cent higher than in the same period last year.

But, whereas vehicles manufactured in the UK managed only a 10.2 per cent increase in registrations to 156,468 units, sales of imported commercials jumped 57.78 per cent to 43,451 units.

At the lighter end of the market, the Japanese companies have made big inroads in the nine months in spite of the agreement that shipments of light commercial vehicles from Japan to the UK this year should not exceed last year's level. (There is a total ban on direct shipments of trucks over 3.5 tons from Japan to the UK.)

Datsun's sales of light commercials were up nearly 100 per cent to 6,308 by the end of September.

Toyota's registrations rose 97 per cent to 4,663.

Mazda's sales increased by 88 per cent to 2,103.

Only Honda failed to match the pace for its sales were 18 per cent up at 2,552. However, Honda has been in the throes of phasing out its very small van for replacement by a new model.

The Department of Trade will certainly be watching the upward surge in Japanese commercial vehicle sales which has taken that country's share of the light commercial vehicle market (under 3.5 tons) from 8 per cent to more than 11 per cent so far this year.

Significantly, only one manufacturer seems to have experienced a fall in sales in the buoyant nine-month period.

Leyland Vehicle's registrations were down from 10,629 to 10,445. But its sister company BL Cars, at the light end of the market, pushed up sales from 33,342 to 37,356 over the same months.

Neave seeks opening

MR. AIREY NEAVE, the Opposition spokesman on Northern Ireland, is on a 36-hour visit to the province.

Although he is seeing Sir Ronald Newman, the Chief Constable, and senior Army officers, the main purpose of his visit is to examine ways in which progress towards some form of local self-government can be made.

His talks have included the official Unionists, the middle of the road, non-partisan Alliance Party, and the predominantly Catholic Social Democratic Labour Party.

Mr. Neave apparently is not seeing the more extreme Unionist, the Rev. Ian Paisley, on this visit.

APPOINTMENTS

APPOINTMENTS WANTED

PERSONAL

LEGAL NOTICES

In the HIGH COURT OF JUSTICE Chancery Division Companies Court. In the Matters of: [illegible] BYRAN PROPERTIES LIMITED [illegible] UNDERWOODS TRANSPORT (LONDON) LIMITED [illegible] HOPECROFT FURNISHING LIMITED [illegible] GOLDEN DAWN ENTERPRISES LIMITED [illegible] JEFFERSON (WEST END) LIMITED [illegible] MILVERTON PLANT HIRE LIMITED and in the Matter of THE COMPANIES ACT, 1948.

NOTICE IS HEREBY GIVEN that Petitions for the winding-up of the above-named Companies by the High Court of Justice were, on the [illegible] presented to the said Court by THE COMMISSIONERS OF CUSTOMS AND EXCISE of King's Beam House, 39-41 Mark Lane, London, EC3R 7HE, and that the said Petitions are directed to be heard before the Court sitting at the Royal Courts of Justice, Strand, London WC2A 2LL [illegible]

G. F. GLOAK,
King's Beam House,
39-41 Mark Lane,
London EC3R 7HE.
Solicitor to the Petitioners.

NOTE.—Any person who intends to appear on the hearing of any of the said Petitions must serve on or send by post to the above-named notice in writing of his intention so to do. [illegible]

In the HIGH COURT OF JUSTICE Chancery Division Companies Court. In the Matters of [illegible] STATIC ENTERPRISES LIMITED [illegible] ALVARO ENGINEERING LIMITED and in the Matter of the Companies Act, 1948.

NOTICE IS HEREBY GIVEN that Petitions for the winding-up of the above-named Companies by the High Court of Justice were, on the 3rd day of October, 1978, presented to the said Court by THE COMMISSIONERS OF CUSTOMS AND EXCISE of King's Beam House, 39-41 Mark Lane, London EC3R 7HE [illegible]

G. F. GLOAK,
King's Beam House,
39-41 Mark Lane,
London EC3R 7HE.
Solicitor to the Petitioners.

NOTE.—[illegible]

In the HIGH COURT OF JUSTICE Chancery Division Companies Court. In the Matter of LAURIE MANSFIELD LIMITED and in the Matter of THE COMPANIES ACT, 1948.

NOTICE IS HEREBY GIVEN that a Petition for the winding up of the above-named Company by the High Court of Justice was on the 11th day of October 1978 presented to the said Court by INFABRICS LIMITED [illegible]

BIRKBECK MONTAGU'S & CO.,
7 St. Bride Street,
London EC4.
Solicitors for the Petitioner.

NOTE.—[illegible]

In the HIGH COURT OF JUSTICE Chancery Division Companies Court. In the Matters of [illegible] SCEPTREBEST LIMITED [illegible] TOPREALM LIMITED [illegible] CAPITAL & SUBURBAN INVESTMENTS LIMITED and in the Matter of THE COMPANIES ACT 1948.

NOTICE IS HEREBY GIVEN that Petitions for the Winding-up of the above-named Companies by the High Court of Justice were on the 11th day of October 1978 presented to the said Court by THE MAYOR AND BURGESSES OF THE ROYAL BOROUGH OF KENSINGTON AND CHELSEA of the Town Hall, Hornton Street, London, W8 [illegible]

A. ELLERY,
Borough Solicitor,
The Town Hall,
Hornton Street,
London W8 7NX.
Ref. WGM LT Fo. 21

[illegible] In the HIGH COURT OF JUSTICE Chancery Division Companies Court. In the Matter of CATHOLIC FIRESIDE LIMITED and in the Matter of The Companies Act, 1948.

NOTICE IS HEREBY GIVEN that a Petition for the winding up of the above-named Company by the High Court of Justice was on the 12th day of October 1978 presented to the said Court by [illegible]

JUDGE & PRIESTLEY,
[illegible]
Solicitors for the Petitioner.

NOTE.—Any person who intends to appear on the hearing of the said Petition must serve on, or send by post to the above-named notice in writing of his intention so to do. The notice must state the name and address of the person or if a firm the name and address of the firm and must be signed by the person or firm, or his or their solicitor (if any) and must be served or, if posted must be sent by post in sufficient time to reach the above-named not later than four o'clock in the afternoon of the [illegible] day of November, 1978.

COMPANY NOTICES

LABOUR NEWS

Election dispute leaves CPSA without executive

BY PHILIP BASSETT, LABOUR STAFF

BRITAIN'S largest civil service union, the Civil and Public Services Association, was left without an executive last night in a bitter dispute over electoral procedure which has publicly reopened the union's deep political divisions.

All but three of the 26-strong executive refused a request from Mr. Len Lever, president, to remain as a caretaker body until a new executive has been elected. The majority who refused were Left-wing candidates in the union's elections in May.

Mr. Lever ruled last week that the present executive could no longer exist after a confidential report found that the moderate vice-president Mrs. Kate Losinksa should have held her position at the election at the annual conference. She lost her seat then to Mr. Peter Coltman, the Communist Broad Left condidate.

The former executive is expected to attend the union's normal executive meeting today. Mr. Lever will again ask the 23 who refused to stay on yesterday to remain, and if they refuse the meeting and subsequent meetings until the new election will not take place.

Branches will re-hold general meetings for the election, and the results of the individual ballots will be sent to the union's headquarters for scrutineering.

Mr. Ken Thomas, general secretary, said last night that he would carry on with the help of the two vice-presidents, Mrs. Losinska and Mr. Reg Williams, a Broad Left candidate at the elections in May, to esure that the interests of the 235,000 members were protected.

He said that the Government should ont assume that because of its "internal difficulties" the union would weaken its position in the coming fight over pay under Stage Four.

The current dispute has its roots in a special conference called in November last year to revise the union's rules.

At the conference, though, the Right was badly defeated by the very thing it had sought to change: a block vote which threw out the proposal by 116,094 votes to 94,793.

Sparring

A less well publicised outcome of the conference, however, was a rule change which made it compulsory for branches to cast their votes at annual conference for candidates they had nominated.

Sparring between the Left and Right was resumed at the union's annual conference in May with the Left circulating a leaflet which asserted that the moderate magazine Daylight had been funded by the Right-wing organisation Truemid.

Though the Right strenuously pointed out that most of the money had by then been repaid, Mrs. Losinska admitted privately that the timing of the leaflet had gone a long way towards her losing the presidential race by an unexpectedly large majority. She also failed to retain her position as vice-president.

Elections for the executive completed the success of left-wingers, with their candidates scooping up 78 per cent of the votes cast for returned members. Far-left candidates, including members of the Communist, Socialist Workers' and Workers Revolutionary parties took 13 of the 26 seats.

This week's crisis was precipitated by a confidential report from a firm of chartered accountants which acts as the union's returning officers. This found that 20 branches at the annual conference had not complied with new rules brought in at the rules revision conference in November. The report said that had votes been cast according to rule, Mrs. Losinska would have edged in as vice-president ahead of Mr. Coltman.

Because Mr. Coltman as declared vice-president did not stand in the elections for the executive, all 26 members were ruled to be dismissed. The new elections will include all the original candidates who now wish to take part again, plus Mr. Coltman.

The right wing is now expected to recoup some of the political losses it suffered at the rules revision and annual conferences by seizing the opportunity Mrs. Losinska's unexpected return to power has given it and campaigning strongly at the elections.

Nurses 15% claim for Cabinet

By Our Labour Staff

MR. DAVID ENNALS, Secretary for Social Services, told representatives of Britain's 420,000 nurses and midwives yesterday that the Cabinet would discuss their claim for a 15 per cent pay rise as a special case outside the Government's pay guidelines.

Union and management representatives presented their detailed case for giving nurses a special award to allow for the nature of their job which makes it difficult for them to seek rises through productivity deals.

The nurses are also seeking to restore their position in the earnings league which put them near the upper quartile for female workers elsewhere in the National Health Service and outside at the time of the 1974 Halsbury award.

Mr. David Williams, assistant general secretary of the Confederation of Health Service Employees and chairman of the staff side, said yesterday that there would be no acceptance of a forward commitment as in the case of the police and firemen in their special awards last year.

The propoffsals are seen as being overdue from last year's phase three pay deal when a bonus-in-lieu of productivity demand was part of the nurses claim.

Dockers challenge pay guidelines

BY PAULINE CLARK, LABOUR STAFF

DOCKERS' leaders in Southampton will today put the "finishing touches" to a pay claim well in excess of the Government's guidelines.

The claim for a large increase in basic rates is expected to follow closely a 20 per cent demand lodged last week by 2,000 Hull dockers in the first significant challenge to the 5 per cent limit by Britain's dock workers.

Hull dockers yesterday began an overtime ban in support of their claim although no formal offer has been made by the employers. Their earlier demand for a substantial increase has already been rejected by the employers who have indicated that any settlement must be within the guidelines.

In both cases, most of the dockers are employed by the British Transport Docks Board which has made it clear that as a State-owned organisation it intends to resist any claim for more than a straight 5 per cent increase. It employs about 1,700 dockers in Hull and about 2,000 in Southampton, out of a total manual labour force of just over 5,000.

The Hull and Southampton dockers have emphasised their frustration over pay by drawing up claims more than two months ahead of their January settlement date. Shop stewards in Hull said yesterday they would step up their action in January if a settlement had not been reached by then.

Offshore caterers recognise unions

ONE of the largest catering firms, employing 500 workers on 11 North Sea offshore installations agreed in principle yesterday to recognise trade unions.

A full agreement specifying terms conditions and installations to be covered will be discussed next month by the company Scot Catering and Offshore Services of Aberdeen, and the two unions.

The agreement was reached after a threat of industrial action by the unions the Transport and General Workers' Union and National Union of Seamen, if their recognition demands were not met by lunchtime yesterday.

The company had made its [illegible] through Electoral Reform Society. Although not complete, this "indicated a tendency" in favour of union recognition, said Mr. Allan Thoars, the general manager, yesterday in Aberdeen.

"The decision has been made that recognition be granted today, and discussions will follow on negotiating rights. It may cover all units, or it may be 90 per cent. We are doing it step by step so that everyone involved fully understands what has taken place," said Mr. Thoars.

Mr. Bill Reid, chairman of the Inter-Union Offshore Oil Committee, and Aberdeen district secretary of the TGWU, said the agreement was an immediate answer to the claim, an agreement in principle of recognition and negotiating rights.

Claiming half the company's 500 work force there, the unions will probably make an initial claim for full rights for all 11 installations.

Their strongest presence is on the Ninian and Forties Fields. Efforts to build membership in other fields can be expected between now and November.

Phase 3 deal for ships' officers

By Nick Garnett

A PHASE THREE deal for Merchant Navy officers which falls within the period of Phase Four is understood to have been sanctioned by the Department of Employment.

The General Council of British Shipping and the four unions representing the officers are being notified by the Department that it considers the deal to be within the limits of the Government's pay policy.

Employers and the unions said that the 44,000 officers were entitled to settle under Phase Three, which technically expired at the end of July, because their last deal was under Phase Two.

Last year the officers, due for a Phase Two settlement in June held back in the hope of settling at a higher figure.

They eventually agreed to a Phase Two deal to run from the end of June and a 12½ per cent productivity deal from November. Their annual settlement date was altered to November leaving the officers out of step with almost all other employee groups.

This year's deal consolidates pay policy supplements as part of the 10 per cent. There will be further [illegible] on changing leave arrangements, medical, severance and redundancy payments.

The settlement was negotiated by representatives of the Merchant Navy and Airline Officers Association by far the biggest union; the Amalgamated Union of Engineering Workers; the Radio and Electronic Officers Union; and the Mercantile Marine Service Association.

Average earnings of officers range from £4,520 for junior engineers and fourth officers, to £10,490 for masters.

Hauliers plan to black cut-price competitors

A NINE-POINT charter aimed at ridding the haulage industry of cut-price clearing house operators—some without their own transport—was adopted by 2,000 lorry drivers who met at Hull yesterday.

Mr. Hugh Marshall, Hull branch secretary of the Transport and General Workers' Union, which had 1,500 members at the meeting, said they were trying to get the charter adopted throughout the country in an attempt to safeguard jobs and codes of practice.

They had evidence, he said, that the activities of cut-price clearing houses were forcing established companies out of business, undermining others and putting jobs in jeopardy.

The nine points include a request to almost 100 haulage companies in the Hull area—with which the unions have agreements—to establish their own clearing houses for excess and return loads.

Companies using cut-price clearing houses were forcing—and the drivers will seek the support of dockers to enforce blacking.

The charter also includes daily distance and starting times clauses, insistence on union rates of pay for drivers, the blacking of all clearing houses without transport and also of established companies which dispose of their vehicles and let their work out to sub-contractors. A company wage register is also to be established.

Hairdressers win new minimum wage rates

NEW MINIMUM wage rates for about 135,000 workers employed in hairdressing were set yesterday by the industry wages council.

The increases generally vary between about 13 and 21 per cent. But the new minimum for most groups of workers is still far short of the £44.50 the Government's Phase Four incomes policy.

The statutory minimum for experienced hairdressers outside London goes up from £32.50 to £37, and in London from £33.50 to £38.

The rate for apprentices outside London is being raised from £16.50 to £20, and in London from £17.50 to £21.

Miners' leaders demand 25%

YORKSHIRE MINERS' leaders yesterday demanded pay rises of more than 25 per cent under bonus schemes.

They called for the basic rate on which bonuses are calculated to be increased from £23.50 to £30 and for "double rises" for men away from the coalface.

They claimed the rise was needed to bring bonus rates into line with increases in basic pay.

Battery plant workers out

EIGHT HUNDRED workers went on strike at the Wolverhampton Every Ready battery plant yesterday after the suspension of ten women in a row over manning levels. The dispute was expected to lay off the remaining 300 workers at the plant in Park Lane, Wolverhampton, by today. The strikers do not plan to return until tomorrow.

BUSINESS AND INVESTMENT OPPORTUNITIES

READERS ARE RECOMMENDED TO TAKE APPROPRIATE PROFESSIONAL ADVICE BEFORE ENTERING INTO COMMITMENTS

LOMBARD

Pay without guidelines

BY PETER RIDDELL

SPECULATIVE games of the "what if . . ." variety are a pleasantly self-indulgent way to pass autumn and winter evenings. There is certainly no shortage of topics—from what would have happened if an election had been held earlier this month to what pay rises would be in the absence of an official limit. The Ford dispute might have turned out very differently if there had been an October election though the pay question is highly uncertain. It is, however, at least arguable that the rate of increase in earnings in the year to next July would be little higher, and possibly lower, without a phase four limit than now looks likely with the policy under severe strain. This is not stated as a forecast, or, as Mr. Hattersley would prefer, a fact, but it is not merely an unsupported guess.

Key influence

There is obviously no hard and fast economic model of the determination of money wages in the short-term. It would be wrong to ignore the impact of institutional influences such as the monopoly power of individual trade unions or, for example, the election of Mr. Moss Evans and his determination to establish his independence—as well as pressures pent-up under earlier rounds of pay policy. But there are also several specific economic influences on pay. On one side, it is possible to point to the moderating impact on expectations of the slackening in the rate of price inflation and the sharp rise in living standards of the last 12 months.

Employers are also not operating in a vacuum since, at least in the private sector, a key influence is the ability of companies to pay such increases. Recent official figures has shown how profit margins have been squeezed this year and the corporate sector has had a large financial deficit: looked at another way, industry does not appear to have a large cushion of net liquidity to protect it from large wage increases, as it had in early 1974.

There are drawbacks to this analysis: it is, for example, arguable that it is precisely when companies are financially most stretched that they will not want to fight pay claims and will concede most rapidly. Differences in liquidity may allow some companies to pay large wage increases, and force up earnings generally, while companies with a dominant market position may be able to pass on rises in the form of higher prices.

The prospects were recently examined in a somewhat different way by the London Business School in its regular Economic Outlook. The school concentrated on the relationships between the exchange rate, world prices levels and earnings. It concluded that while last year UK earnings levels were well below normal relative to the world price level and some increase could be justified, this is no longer the case. At present exchange rates, the world price level is likely to exercise a restraining influence upon wage increases: companies are unlikely to be able to afford to pay more this year than the underlying world inflation rate plus whatever productivity increases are actually achieved. As long as the exchange rate remains firm this might in practice restrict the rise in earnings to about 11 to 12 per cent.

This is a plausible, though not a conclusive theory, especially as these constraints apply only to the private sector and the lead has often come from public sector settlements. Cash limits can, of course, exercise an influence, though, like monetary targets, they are not in themselves a workable instrument of pay policy in the short-term. It is unrealistic to believe that cash limits and monetary guidelines will directly limit pay settlements in face of union bargaining power unless other economic factors are also working towards moderation, as they are at present. So it is possible that without rigid guidelines the rise in earnings be below the 14 to 16 per cent rise of 1977-78 and perhaps low enough to ensure a continuation of single figure price inflation, as well as allowing some flexibility in negotiations.

Seen as defeat

The problem with the Government's approach has been that it is likely to bring the worst of both worlds. The policy is unlikely to keep the rise in earnings down to the target of 7 per cent and the actual outcome may not be more than, say, a rise of 10 to 12 per cent. But this will be seen as a defeat for the authority of government and a strengthening of union power with all the undesirable appendages of incomes policy being perpetuated. Just as with exchange rates, politicians and officials would be better advised to resist the temptation to try to control market pressures all the time.

Predictions and outcomes

PROBLEMS ASSOCIATED with change have dominated the minds of most people in the film and television industries, over the past 10 years. Some nine years ago, one writer on the business was saying that the real dilemma for decision-makers was whether to invest in the new technologies precipitating the change — and risk a serious loss through backing the wrong horse; or worse, to wait and see while competitors coolly cleaned up the market.

The observations were mine, in this column, and it came as a slight shock to read someone else quoting them last week in a forthcoming article about the TV rental business. As is often the case in the prediction game, history has proved many of my forecasts to be true but the timing to be slightly wrong. Some companies did back the wrong horses, such as Rank within the EVR videocassette system (based on film, not videotape); and Decca in its support for the TeD video disc player. Others did leave it too late, perhaps, as witness the unassailable lead in videocassette equipment now established by Sony and JVC and the failure of the Philips' system in North America partly because it arrived there too late.

The videocassette revolution is now with us, although nine years ago many cynics doubted it would even happen. But it has taken about three to four years longer than at least I expected. The next chapter in the revolution, again behind predicted schedule but defying those who doubted its arrival at all, is the commercial launch of the Philips/MCA video disc player. This will take place later this year around the 15th December, in one selected area in the U.S., to be followed in 1979 with national marketing. It is likely that the UK will be the next country on the marketing schedule, some 14 months from now.

There is now less doubt in the minds of those in the business as to what exactly is going to happen in the near future. The guessing element is now a minor factor. Videocassette equipment is a growth business — U.S. video imports for the first half of 1978 were 238,137 units, a 289 per cent rise on the first-half of 1977. Philips claims that demand for its own VCR system (largely European) has outstripped supply in the same period.

A symptom of the confidence in this market comes with the establishment by MCA and International Video Systems of a Middle East videocassette distribution company: United Video International. This will draw on the huge MCA/Universal stockpile of feature films and television programmes. For the record another nine years hence, I doubt if the market for pre-programmed material like this will survive on videocassettes, with mass-produced video disc offering a cheaper and more convenient alternative. This will leave the videocassette as mainly a recording medium, and also as a distribution medium for minority interest programmes where the number of copies involved (for example, under 5,000) would be uneconomic on video discs.

Still caught uncomfortably in the middle is the film industry. To some extent, it is coming to terms with video, at least in the sponsored film industry. Many of the production companies now offer video production as well, and most are supplying clients at some time or another with videocassette copies of films along with the 16 mm and 8 mm prints. Likewise most, if not all, of the film processing laboratories have opened video duplicating and/or videotape-film transfer services. The latest entry has been Kay Laboratories, which have just started a tape-to-film service. Of the leading processing houses in UK, only Humphries and Filmatic (both owned by the BET group) and Universal Film Laboratory remain without a video commitment.

FILM AND VIDEO

BY JOHN CHITTOCK

The UK bastion of sprocket holes, Samuelson Film Service—one of the world's leading film *equipment hire specialists*—is now well into video, and the only major enigma remains Kodak, which owns a videotape recording head manufacturing company and produces some videotape in Paris but little else.

Confusion continues to abound however. Whereas most of the pundits will agree that the standardisation battle over videotape systems is settling down to a straight fight between Sony and JVC, Philips continue the battle with their own system (and a new one in prospect). Even Grundig are joining the fray with an incompatible version of the Philips system—the Grundig SVR—which yields 4 hours playing time per cassette and is claimed by them to have various quality advantages over the rivals. It is better, perhaps, not even to mention BASF's LVR (Longitudinal Video Recording) which still lurks near commercial reality with the promise of even greater tape economy.

A theme is, however, emerging. Almost nine years ago in this column, I only speculated about it—"the ultimate dream is large-screen domestic television with all manner of visual services controlled by telephone dialling." The large screen is a long way off, but the rest has arrived. *Yet it now goes even deeper than that.* The emerging theme is the control of visual information—the ability to take pictures, still or moving, and by reducing them to electronic signals to allow almost infinite manipulation of those pictures. We are witnessing it already with viewdata and teletext and even with the fixed images of the motion picture film as they become involved in the chat with the new tape-to-film transfer processes.

One novel example of the trend appears in a range of products recently introduced by a new British company, Hampton Video Services. With these plug-in units, television pictures can be processed to yield information in forms other than mere light and shade—such as automatic measurements of dimensions in the subject, readings of brightness intensity at any point in the scene, detection of flaws, for example cracks, responses to movement (such as articles on a conveyor) or even artificial colouring according to the brightness of tones in the picture.

Perhaps the next fertile area for speculating about the future will be found by looking at other old ideas worthy of resurrection. For a starter, I offer the zoetrope, one of the earliest methods of viewing moving pictures, on a strip of printed paper: the paper was loaded inside a revolving drum and viewed through slots in the drum. It is extremely cheap, hand operated and prints can be mass produced even on newsprint. Just the ingredients of a boom product in the Third World.

Hastings-Bass has chance of two Warwick winners

RACING

BY DOMINIC WIGAN

WILLIAM HASTINGS-BASS, who will now definitely aim Greenland Park at the top sprints next season rather than trying to get her ready in time for the 1000 Guineas (which in any event would probably expose stamina limitations), looks set for a first and last race double at Warwick today.

Pluvial represents him in the opener, Division I of the Market Square Maiden Stakes, and Adorit—a close relation—goes for the second division of the same race.

Although Pluvial, a daughter of that prolific Vilmorin mare, Pelting, was a disappointment at Ascot last time out—she finished third of nine behind Celtic Halo and Hadon in the Michael Sobell Stakes—it could be that she had an excuse.

Not only did she blow a good deal after the race, but it was also found that she had a rather high white blood cell count on her return to Newmarket.

Provided that she can overcome a bad draw and reproduce her encouraging homework with Greenland Park on this, her third race course appearance, Pluvial should prove up to giving that hitherto disappointing stallion, Habat, his second juvenile winner.

For the danger, I turn to another who has shown a good deal at home. Explosiva, a half-length runner-up to Quibbling Streak in a £3,000 event at York before disappointing badly at Wolverhampton.

Explosiva is another well-bred sort: being by Explodent out of Whispering Willow, a half-sister to the champion Canadian grass horse, Victorian Prince.

In contrast to Pluvial, Adorit, another daughter of Habat, has been having a busy time and this will be her sixth attempt to get off the mark.

Joe Mercer, Adorit's rider and also partner of Pluvial, did not have the ride on the Hastings-Bass filly at Lingfield recently but he had plenty of time to weigh her up for it was only in the final 100 yards that he brought Sikhara with a late run to deprive Adorit of the spoils.

I expect him to try to make all the running on Adorit and expect Chukaroo's half-brother, Jakaroo, providing the chief threat.

Two other possible winners on an otherwise tricky card are Civic Commotion and Braemore. The Neil Adam-trained Civic Commotion, a grey daughter of Town Crier, has shown little since running out an easy winner of a maiden event at Folkestone last season, I shall be disappointed if she cannot win the Prince Rupert Handicap off 8st 4lb.

Chris Thornton, who saddles Braemore for the seller, could also turn out a winner nearer home at Redcar. There he saddles Never Say Guy for the Hanging Stone Handicap. Godet, a final declaration stage withdrawal from Warwick's seller should win the Airy Hill Selling Stakes.

WARWICK

2.00—Pluvial***
2.30—Braemore*
3.00—One-Cal
3.30—Flying Optician
4.00—Civic Commotion**
4.30—Adorit

REDCAR

2.15—Godet
3.15—Never Say Guy

TV/Radio

† Indicates programme in black and white

BBC 1

6.40-7.55 am Open University (Ultra High Frequency only). 9.38 For Schools, Colleges. 12.45 pm News. 1.00 Pebble Mill. 1.45 How Do You Do? 2.00 You and Me. 2.14 For Schools, Colleges. 3.20 Cawl a Chan. 3.53 Regional News for England (except London). 3.55 Play School. 4.20 Felix the Cat. 4.25 Jackanory. 4.40 The Space Sentinels. 5.00 John Craven's Newsround. 5.10 The Story Beneath the Sands.

5.40 News
5.55 Nationwide (London and South-East only).
6.20 Nationwide.
6.50 David Essex (London and South-East only).
7.20 James Burke's Connections.
8.10 Dallas.
9.00 News.
9.25 Play for Today.
10.45 Tonight.
11.25 Roads to Conflict.
11.50 Weather/Regional News.

All Regions as BBC1 except at the following times:

Wales—10.00-10.20 am I 'Ysgolion. 5.55-6.20 pm Wales Today. 6.50 Heddiw. 7.10 Pobol y Cwm. 7.40 Dad's Army. 8.10-9.00 James Burke's Connections 11.25 Rugby Wales "B" v Argentina (highlights). 12.00 Dechrau Siarad. 12.25 am News and Weather for Wales.

Scotland—5.55-6.20 pm Reporting Scotland. 6.50-7.20 The Fiddler's Rally (the 1978 National Mod.). 11.50 News and Weather for Scotland.

Northern Ireland—3.53-3.55 pm Northern Ireland News. 5.55-6.20 Scene Around Six. 6.50-7.20 Foyle Festival '78. 11.50 News and Weather for Northern Ireland.

England—5.55-6.20 pm Look East (Norwich); Look North (Leeds, Manchester, Newcastle); Midlands Today (Birmingham); Points West (Bristol); South Today (Southampton); Spotlight South-West (Plymouth); 6.50-7.20 East (Norwich) The 7.12 Ex-Yarmouth; Midlands (Birmingham) Copse and Maggots; North (Leeds) Lifelines; North East (Newcastle) Tuesday North; North West (Manchester) Sit thi deawn; South (Southampton) The Brain Game; South West (Plymouth) Peninsula; West (Bristol) Day Out.

BBC 2

11.00 am Play Schools (as BBC1 3.55 pm).
2.30 pm Tecair Ltd.
3.00 Film as Evidence.
3.30 The Living City.
5.20 Open University.
7.00 Dicame.
7.25 News on 2 Headlines.
7.30 One Man and His Dog.
8.00 One More Time!
8.30 Roots of England.
9.00 Roots.
10.35 Floodlit Rugby League for the BBC2 Trophy.
11.20 Late News on 2.
11.30 The Old Grey Whistle Test.

LONDON

9.30 am Schools Programmes. 12.00 Chorlton and the Wheelies. 12.10 pm Pipkins. 12.30 Treasures in Store. 1.00 News, plus FT Index. 1.20 Thames News. 1.30 Crown Court. 2.00 After Noon. 2.25 Born and Bred 3.20 Heart to Heart. 3.50 The Sullivans. 4.20 Get it Together. 4.45 Magpie. 5.15 Emmerdale Farm.

5.45 News.
6.00 Thames at 6.
6.25 Help!
6.35 Crossroads.
7.00 Botanic Man.
7.30 Fantasy Island.
8.30 Selwyn.
9.00 Whickers World: India.
10.00 News.
10.30 Two Girls and a Millionaire.
11.30 Lou Grant.
12.25 am Close: A Pre-Raphaelite painting accompanied by the music of Brahms.

All IBA Regions as London except at the following times:

ANGLIA

1.25 pm Anglia News. 6.00 About Anglia. 7.00 Survival. 11.30 Rafferty. 12.25 am I Believe.

ATV

12.30 pm To Be Advised. 1.20 ATV Newsdesk. 3.55 The Electric Theatre Show. 5.15 Mr. and Mrs. 6.00 ATV Today. 7.00 Emmerdale Farm. 11.30 Jazz Concert. 12.00 Something Different.

BORDER

†1.20 pm Border News. 2.00 Houseparty. 5.15 Jonny Quest. 6.00 Lookaround Tuesday. 7.00 Emmerdale Farm. 11.30 Skiing with Gina. 12.00 Border News Summary.

CHANNEL

1.25 pm West at 1.30. 5.15 Mr. and Mrs. 6.00 Report at Six. 7.00 The Best of the Muppets. 10.28 Channel Late News. 11.30 Pro-Celebrity Snooker. 12.10 am Commentaires et Previsions Meteorologiques.

GRAMPIAN

9.25 am First Thing. 1.20 pm Grampian News Headlines. 5.15 Mr. and Mrs. 6.00 Grampian Today. 6.10 Sounds of Britain. 11.30 Power Without Glory. 12.25 am Reflections. 12.30 Grampian Late Night Headlines.

GRANADA

1.20 pm This is Your Right. 5.10 What's New. 5.15 Crossroads. 6.00 Granada Reports. 6.30 Emmerdale Farm. 7.00 University Challenge. 11.30 Dan August.

HTV

1.20 pm Report West Headlines. 1.25 Report Wales Headlines. 2.00 Houseparty. 5.20 Crossroads. 6.00 Report West. 6.15 Report Wales. 6.30 Botanic Man. 7.00 Three Little Words. 11.30 The Outsider.

HTV Cymru/Wales—As HTV General Service except: 1.20-1.25 pm Penawdau Newyddion y Dydd. 4.20-4.35 Goglis. 6.00-6.15 Y Dydd. 10.30 Dim Ond Heddiw. 11.00 World in Action. 11.30-12.30 am Moynihan.

HTV West—As HTV General Service except: 1.20-1.30 pm Report West Headlines. 6.15-6.30 Report West.

SCOTTISH

1.25 pm News and Road Report. 5.15 Batfink. 5.20 Crossroads. 6.00 Scotland Today. 6.30 What's Your Problem? 7.00 Emmerdale Farm. 11.30 Late Call. 11.35 The Big Break.

SOUTHERN

1.20 pm Southern News. 2.00 Houseparty. 5.15 The Undersea Adventures of Captain Nemo. 5.20 Crossroads. 6.00 Day by Day including Southsport. 7.00 Emmerdale Farm. 11.30 Southern News Extra. 11.40 Pro-Celebrity Snooker.

TYNE TEES

9.25 am The Good Word followed by North East News Headlines. 1.20 pm North East News and Lookaround. 5.15 The Brady Bunch. 6.00 Northern Life. 7.00 Emmerdale Farm. 11.30 The Bob Newhart Show. 12.00 Epilogue.

ULSTER

1.20 pm Lunchtime. 4.18 Ulster News Headlines. 5.15 Cartoon. 5.20 Crossroads. 6.00 Reports. 6.35 The Mary Tyler Moore Show. 7.00 Emmerdale Farm. 11.30 Bedtime.

WESTWARD

12.27 pm Gus Honeybun's Birthdays. 1.20 Westward News Headlines. 1.25 West at 1.30. 5.15 Mr. and Mrs. 6.00 Westward Diary. 7.00 The Best of the Muppets (Vincent Price). 10.28 Westward Late News. 11.30 Pro-Celebrity Snooker. 12.10 am Faith for Life.

YORKSHIRE

1.20 pm Calendar News. 3.20 Calendar Tuesday. 5.15 You're Only Young Twice. 6.00 Calendar (Emley Moor and Belmont editions). 7.00 Emmerdale Farm. 11.30 The Bob Newhart Show.

RADIO 1 247m

(S) Stereophonic broadcast.
† Medium Wave.

5.00 am As Radio 2. 7.02 Paul Burnett. 9.00 Simon Bates. 11.31 Peter Powell. 2.00 pm Tony Blackburn. 4.31 Kid Jensen. 7.30 Folk '78 (S) (joins Radio 2). 10.02 John Peel (S). 12.00-2.02 am: As Radio 2.

RADIO 2 1,500m and VHF

5.00 am News Summary. 5.02 Tony Brandon (S) including 6.15 Pause for Thought. 7.32 Terry Wogan (S) including 8.27 Racing Bulletin and 8.45 Pause for Thought. 10.02 Jimmy Young (S). 12.15 pm Waggoners' Walk. 12.30 Pete Murray's Open House (S) including 1.45 Sports Desk. 2.30 David Hamilton (S) including 2.45 and 3.45 Sports Desk. 4.30 Waggoners' Walk. 4.45 Sports Desk. 4.50 John Dunn (S) including 5.45 Sports Desk. 6.45 Sports Desk. 7.02 On The Third Beat (S). 7.30 Folk '78 presents Randogs in concert (S). 8.02 Tuesday Night is Gala Night: Tony Martin in concert with guest Penny Lane (S). 9.02 Among Your Souvenirs (S). 9.55 Sports Desk. 10.02 Variety Club. 11.02 Peter Clayton introduces Round Midnight, including 12.00 News. 2.00-2.02 am News Summary.

RADIO 3 464m, Stereo & VHF

6.55 am Weather. 7.00 News. 7.05 Overture (S). 8.00 News. 8.05 Morning Concert (S). 9.00 News. 9.05 This Week's Composer: Berkeley. 9.45 Plainsong and the Rise of European Music (S). 10.00 Schiller Trio part 1, McCabe (S). 11.10 In Short. 11.20 Schiller Trio part 2, Mendelssohn, Brahms (S). 12.05 pm BBC Welsh Symphony Orchestra part 1: Haydn, Hoddinott (S). 1.00 News. 1.05 The Arts Worldwide. 1.20 BBC Welsh SO part 2: Franck (S). 2.10 Music at St. George's Bristol (S). 3.10 Master Cellists. 3.55 Liszt on Pilgrimage (S). 5.00 Jazz Today (S). 5.45 Homeward Bound (; only from 6.27). 6.30 News. 6.35 At Home. Personal view of Puccini's opera "Madame Butterfly." 7.30 The Aff. of ... Mary Garden. 8.00 Live from the Royal Festival Hall part 1, Copland, Rodrigo (S). 8.35 Irish Nationalism in Transition (talk by Professor F. S. L. Lyons). 8.55 Live from the Festival Hall part 2: Brahms (S). 9.50 The Prelude: Extracts from Wordsworth's autobiographical poem. 10.20 The Trio-Sonata (S). 11.25 Budapest Symphony Orchestra (S). 11.45 News. 11.50-11.55 Tonight's Schubert Song.

Radio 3 VHF only—6.25-7.30 pm Open University.

RADIO 4

434m, 330m, 285m and VHF

6.00 am News Briefing. 6.10 Farming Today. 6.30 Today: Magazine, including 6.45 Prayer for the Day. 7.00 and 8.00 Today's News. 7.30 and 8.30 News Headlines. 7.45 Thought for the Day. 8.45 My Apprenticeships. 9.00 News. 9.05 Tuesday Call. 10.00 News. 10.05 In Britain Now. 10.30 Daily Service. 10.45 Morning Story. 11.00 News. 11.05 Thirty-Minute Theatre. 11.35 Let's Talk About Me. 12.00 News. 12.02 pm You and Yours. 12.20 Desert Island Discs. 12.55 Weather; programme news. 1.00 The World at One. 1.30 The Archers. 1.45 Woman's Hour including 2.00-2.02 News. 2.45 Listen with Mother. 3.00 News. 3.05 Vanity Fair (S). 4.00 News. 4.05 Gardeners' Question Time. 4.35 Story Time. 5.00 PM: News magazine. 5.55 Weather; programme news. 6.00 News. 6.30 I'm Sorry I Haven't a Clue (S). 7.00 News. 7.05 The Archers. 7.20 File on 4. 8.00 Private Eye, Public Interest. 8.45 Science Now. 9.30 Kaleidoscope. 9.59 Weather. 10.00 The World Tonight. 10.30 The Jason Explanation of Illness (S). 11.00 A Book at Bedtime. 11.15 The Financial World Tonight. 11.30 News.

BBC Radio London

206m and 94.9 VHF

5.00 am As Radio 2. 6.30 Rush Hour. 9.00 London Live. 12.03 pm Call In. 2.03 206 Showcase. 4.03 Home Run. 6.10 Look, Stop, Listen. 7.30 Black Londoners. 8.30 All that Jazz. 10.03 Late Night London. 12.00 Close: As Radio 2.

London Broadcasting

261m and 97.3 VHF

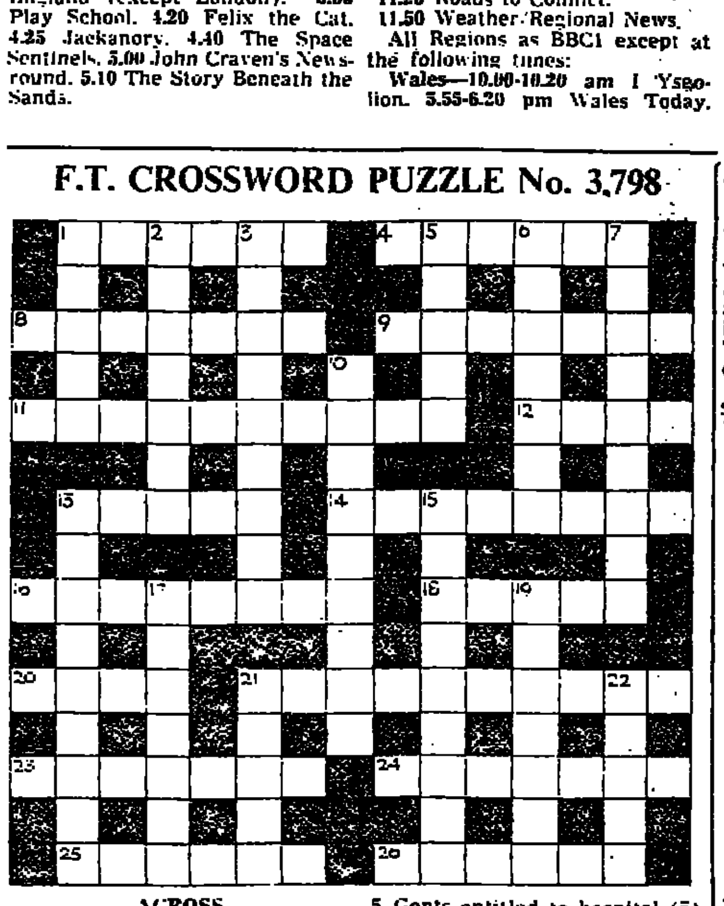
5.00 am Morning Music. 6.00 AM: Non-stop news, information, travel, sport. 10.00 Brian Hayes Show. 1.00 pm LBC Reports. 3.00 George Gale's 3 O'Clock Call. 4.00 LBC Reports (continues). 8.00 After Eight. 9.00 Nightline. 1.00 am Night Extra.

Capital Radio

194m and 95.8 VHF

6.00 am Graham Dene Breakfast Show (S). 9.00 Michael Aspel (S). 12.00 Dave Cash (S). 3.00 pm Roger Scott (S). 7.00 London Today (S). 7.30 Adrian Love's Open Line (S). 9.00 Nicky Horne's Your Mother Wouldn't Like It (S). 11.00 Tony Myatt's Late Show (S). 2.00 am Duncan Johnson's Night Flight (S).

F.T. CROSSWORD PUZZLE No. 3,798



ACROSS

1 Everybody found in favourite bed (6)
4 Made sailor appear vaguely to be flowering (6)
8 Waterproof a barrier with road material (7)
9 Liberates one before a flower (7)
11 Unite to enlist (4, 6)
12 Doctor returns to students' debate (4)
13 Grub taken by the French right to Virginia (5)
14 Drink to lead me on maybe (8)
16 Back to front in Surrey (8)
18 Organ not recorded right (5)
20 A road out (4)
21 Game in company speeds smoothly (5, 5)
23 Land in eastern U.S.A. (7)
24 Complaint from master to student over song (7)
25 Complete National Trust in Ireland (6)
26 Average that is appropriate for ungenerous person (6)

DOWN

1 Academy president goes to party in foreign gallery (5)
2 Pound breadwinner gives novice (7)
3 Disappear with pa over tea somehow (9)
5 Gents entitled to hospital (5)
6 Provide too many staff for supervisor (7)
7 Demand for defensive material? (4, 5)
10 Reduce size of descending notes (5, 4)
13 Was it Deal that became ravaged? (4, 5)
15 Drink gets money out of fish (4, 5)
17 Cure for boring sailor (3-4)
19 Scoundrel making large house fashionable (7)
21 Born before king of tragedy became dim-sighted (5)
22 Number one's on point of baving row (5)

Solution to Puzzle No. 3,797

P	R	E	T	O	R	I	A	■	H	O	B	A	R	T
I	■	R	■	Y	■	N	■	■	■	P	■	N	■	U
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K	■	A	■	T	■	I	■	■	■	N	■	I	■	N
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N	■	A	■	R	■	N	■	S	■	Y	■	O	■	E
■	■	■	■	■	O	F	F	T	H	E	C	U	F	F
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The Management Page

EDITED BY CHRISTOPHER LORENZ

Robert Graham reports on how the new head of INI is attempting to rationalise his disparate State leviathan

Grasping Spain's State-owned bull by the horns

UNTIL Spring this year Jose Miguel de la Rica was a successful businessman whose sole experience was in the private sector. Outside the northern industrial region of Bilbao—where he had made his reputation, mainly in the domestic appliance field—he was a little known figure.

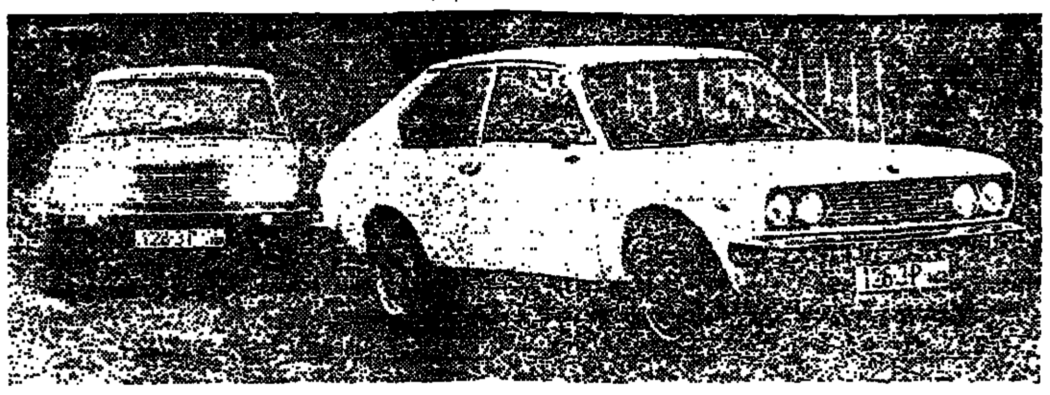
Only those who knew him well believed he had the ability and stature to cope with the awesome task of taking over the presidency of INI, Spain's state holding company, at a critical stage in its development.

He accepted the appointment in May—with some misgivings. His task has been to steer INI away from its old position as an instrument of state interventionism (of the most paternalistic kind) to being a modern holding company in a market orientated economy. Thus he has had both to break with the past yet come to terms with the intricate mixture of socio-politico-economic motives that have led INI since its creation in 1941 to become involved in virtually every sector of the economy, to a greater or lesser degree. INI directly controls 67 companies and indirectly a further 200, in sectors ranging from aerospace through steel and shipbuilding, to milk production.

From the start Mr. de la Rica, clearly influenced by his experience in the private sector, has adopted a firm market approach to INI's activities. This has led him to lay emphasis on three main points: consolidation of INI as a holding company; improving the quality and the style of management; and isolating those areas of investment which *should* be the interest of a state holding company.

According to Mr. de la Rica, INI could no longer afford to operate as it had in the past. The central management of INI acted as a form of umbrella for what were effectively a series of uncoordinated activities. "There were companies whose labour, financial, marketing and technical policies differed widely one from the other, with little coordination or feeling that they were really part of INI," he says. As a result Mr. de la Rica has now drawn up common criteria so that INI companies adopt a much greater degree of uniformity, especially in budgeting procedures and labour policy. This in turn has led to a greater interchange of information among the INI companies.

Jose Miguel de la Rica, president of INI



Two models of the Seat 128—the 1,200 cc and the 1,430 cc. INI has a major stake in the company.

Rodriguez Sahagun, Minister of Industry.

Priority

More immediately obvious have been the changes begun in the style and quality of management. As a first priority Mr. de la Rica has set out to reduce the unwieldy size of the boards of INI companies. Currently INI has some 850 persons serving on the boards of its directly controlled companies, and a further 3,000 on those companies it controls indirectly.

Often these boards have contained between 22 and 24 members, many of whom pulled little, if any, weight. This reflects the old Franquist policy of allowing senior civil servants or the military to hold such posts as sinecures, to say nothing of more direct political posting of former ministers. Mr. de la Rica intends to limit the size of boards in future to between 10 and 12 members. This will mean that at least a third of the existing board members will be pruned, and perhaps more in view of his other intention of introducing better qualified people and placing a maximum age limit for members of the board.

While recognising that INI is a government institution subject to its share of bureaucracy, Mr. de la Rica has begun to cut through red tape. More important, he has begun to break down the old practice of pyramidic responsibility: decisions, often quite trivial ones, had to be taken at the highest level simply because individual responsibility was discouraged.

Here Mr. de la Rica is doing two things. He is encouraging the establishment of small flexible teams and promoting the concept of decentralisation in decision-making. Also, for the first time, he is introducing the idea of bonus payments to management to stimulate productivity and profitability. He wants INI to be profit orientated.

He feels that unless such changes in managerial style are made, it will be impossible to attract the kind of talent he would like to see in INI. "We do have a problem in recruitment. I would like to recruit more from the private sector but private sector wages are more attractive, and as a public institution we have to ask for a contract lasting from three to four years," he says.

However, he has already attracted two key people from the private sector to work for the INI-controlled steel concern, Ensidesa, which will be playing an increasingly larger role in the steel sector, and he has just recruited another top executive to take over the development of INI's involvement in the electronics sector.

Attention

The electronics sector is one of the areas which Mr. de la Rica has singled out for special attention. "We must become more involved in the electronics field," he says. He also considers that INI should now concentrate on developing data processing, defence industries — a term currently covering warships, weapons and some electronics— as well as companies associated with regional development (especially agri-business and marketing concerns).

Until now INI has had no such investment strategy and is well behind its European counterparts in promoting Spanish involvement in the fast developing fields of data processing and electronics in general. As for the defence industries — almost entirely controlled by INI companies — these are recognised to have been inefficiently run and poorly utilised. This was largely because the decisions were made by the military with little understanding of business and industry, and whose incompetence was protected by the blanket of secrecy that surrounds all Spanish defence establishments.

Though a delicate operation, the ultimate aim is to introduce more civilians into the management of the defence industries. At the same time Mr. de la Rica believes INI should take advantage of the potential in development of the defence industries. "We have a good market here in Spain with the armed forces, the police and certain public institutions and we can break into certain export markets," he says. For instance in the past little effort was made to insist on Spanish local manufacture of a portion of foreign supplied equipment.

Some significant changes have already been made. A special job of co-ordinator within the defence industries—and between them and other relevant interests—has been created, while the heads of Bazan (the navy shipbuilding company owned by INI) and Casa (the country's aerospace company controlled by INI) have been replaced. Bazan is INI's second biggest loss maker, and improved management techniques alone are expected to create significant savings.

Just as there are areas where Mr. de la Rica feels INI should become more heavily committed, other sectors exist where he would like to reduce INI's presence. This is especially the case of the motor industry where INI holds important stakes in both saloon car production (Seat) and in light and heavy commercial vehicles (Mevosa and Enasa). He has been instrumental in instituting discussions with Fiat, which already has a 36 per cent stake in Seat, to buy out INI's own 34 per cent interest. Similar discussions have begun with Daimler Benz over Mevosa, and at least three multinational groups over INI's share in Enasa.

Handicap

The major handicap in all these innovations is the lack of a clearly defined government view of INI's role. For all its talk about placing INI to operate in a market economy, the government still basically regards INI as an instrument of state—no matter what Mr. de la Rica would like to do.

The new INI leadership is also handicapped by the relationship the Minister of Industry, Rodriguez Sahagun, feels his ministry ought to have with INI. He regards INI as under his tutelage, so weakening the concept of establishing INI as a more independent institution. While this means that INI will continue to be saddled with some involvement which is socio-economic and political, Mr. de la Rica hopes that a streamlined INI has a better chance of coping with this dual role.

Dangling a tax relief carrot in the Dutch Co-op arena

BY ROBERT OAKESHOTT

RELIEF from capital gains tax for those owners of companies who sell to their workforces, will be the most striking recommendation in a report on Dutch workers' co-ops which will almost certainly be published in the next month or so.

The report was commissioned by the last Dutch, social democratic, Government in early 1977 from the existing Dutch Federation of Workers' Co-ops, The Associatie van Bedrijven op Co-operatieve Grodslag (ABC).

The report will, of course, contain a wide range of further recommendations: about the optimum legal form of workers' co-ops, about the need for co-op members to be treated as normal employees in relation to the country's social insurance and welfare arrangements and, perhaps most important in the long term, about ways in which these enterprises can strengthen their management and thus their credit worthiness and more general credibility with the Dutch banks and the Dutch public. But in the short term it is the recommendation for capital gains tax relief when an enterprise is sold to its workforce and transformed into a co-op which is likely to attract the most attention both in the Netherlands and elsewhere.

The issue of this tax relief within the Netherlands is by no means academic. At least two building enterprises in the small and medium sized category—the larger of which, Storimans of Tilburg, employs around 150 people—have reached the stage in considering whether to convert themselves into co-ops, in discussions with the Government on what their tax liabilities would be.

There are also grounds for the belief that the Government may turn out to be something of a "soft touch" when it comes to a decision about capital gains tax liability in these circumstances. That is because of an ad hoc official decision to excuse liability when a fairly substantial Dutch building and civil engineering enterprise (its 1977 turnover was Fls 106m—roughly £25m) was sold to its workforce and converted into a co-op in March 1976.

The enterprise, a private company owned by the Moes family, which converted itself into Co-op Bouwbedrijf H. Moes b.v., was told at the time when relief from capital gains tax was granted, that its circumstances had been judged to be special. And it was put about by the authorities that the Moes case should not and would not be treated as a precedent.

All the same it is easy to see why the owners of Dutch private companies which are considering conversion now see themselves as having a real chance of avoiding capital gains tax if they sell out to their workforces. It is easy to see too why the drafters of the forthcoming report on Dutch workers' co-ops believe that in recommending this change in the law they may be pushing at an open door.

The chances of at least one conversion in the building and civil engineering sector next year are probably better than even. That is partly because the pioneer enterprise in this category, the Moes Co-op based on Zwolle in central Holland, is giving visitors—and it has many—a cautiously optimistic account of its experience over the two and a half years since its conversion. Profits have improved. And, though not spectacular, the improvement has been such that the co-op now expects that by the end of this year it will have repaid the Fls 1m loan from the Moes family which helped the purchase to take place in the first place. Under the terms of the loan agreement repayment was to have been over five years. So the results since conversion have evidently been no worse than expected.

Improvement

In fact they have been a good deal better. According to the Co-op's chief executive and managing director, Ir. van der Graaf, there was a substantial improvement in the enterprise's net profits between 1976 and 1977 if account is taken of tax losses from the former private company which were carried forward into the Co-op's first year. Allowing for that adjustment the results improved, according to Ir. van der Graaf, from a break-even position in 1976 to a post tax profit of Fl 800,000 in 1977. And for the 12 months to end December he now expects that the corresponding figure will be Fl 2m.

A good deal of the current interest in possible conversion among building and civil engineering companies, or so he believes, stems from the fact that there is a high incidence of losses and no very convincing prospect of converting them to profits at an early date.

Ir. van der Graaf believes that the improved performance of the Co-op is largely related to manpower budgets and labour productivity. And the most important underlying factor behind that was, in his view, the slacker condition of the labour market.

Nevertheless he also expressed his belief that a greater solidarity between blue collar workers and management was beginning to develop in the Co-op. He also emphasised that the trade unions, which had been early supporters of the experiment, remained very much behind it. Greater solidarity inside the enterprise and the absence of trade union hostility might, be thought, explain the Co-op's comparative improvement vis-a-vis its competitors.

In any event and partly because of this comparatively successful experience by the Moes co-op since its conversion, it is the building and civil engineering industry which offers the brightest prospect of some significant expansion in Dutch workers' co-ops over the next few years. On the other hand it has to be recognised that whatever its potential, the sector in the Netherlands, as in the UK, is still very small: a total of 17 enterprises are currently affiliated to the ABC with a combined annual turnover well below £50m and a labour force of less than 2,000. It is probably also true that the present "centre right" government in Holland is somewhat less enthusiastic about workers' co-ops than its predecessor.

All the same there is clearly a fair chance that a combination of low profitability plus an exemption from capital gains tax liability, especially if that is formally granted, would induce a significant number of owners of conventional companies to think seriously about selling to their workforces and converting into workers' co-ops. It could happen in particular that private companies faced with a "successor" problem would start considering the workers' co-op possibility very seriously indeed.

Back in the UK capital gains tax relief for the owners of companies which are sold to their workforces and converted into co-ops, was in fact one among a series of amendments to this year's Finance Bill which received backing from all three main parties in the House of Commons, but which was never debated because of pressure of time. Moreover there are at least a handful of small and medium sized UK companies which are approaching a succession problem and which are known to be toying with the idea of a co-op solution.

Business courses

Management Skills for Supervisors, AMR International, London, November 6-8, at the Royal Lancaster Hotel. Fees £525.00. Details from AMR International, 6-10 Frederick Close, Stanhope Place, London W2.

Project Appraisal: Exploiting New Market Opportunities. London Business School. November 6-10. Fee £325. Details from London Business School, Sussex Place, Regent's Park, London NW1.

The Skills of Supplier Sourcing Selection and Negotiation, PEL. November 9 at Clarendon Hotel, Leamington Spa, Midlands. Fee £60. Details from Purchasing Economies Limited, Pel House, 35 Station Square, Petts Wood, Kent.

Product Liability. RRG (London) Limited, December 7, at Royal Lancaster Hotel, London. Fee £75.00 plus £6.00 VAT. Details from Risk Research Group (London) Limited, Bridge House, 181 Queen Victoria Street, London EC4.

National Energy Managers' Courses, British Gas School of Fuel Management, Wharf Lane, Solihull, West Midlands. Fee £165. November 27-December 1. Details from Department of Energy, Box 1685, Thames House South, Millbank, London SW1.

Disclosure of Financial Information to Employees, ICMA, at the Cafe Royal, 68 Regent Street, London W1, November 14. Fee £54.00 members, £64.80 non-members. Details from IPM, Central House, Upper Woburn Place, London WC1.

Technical Page

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

● PLASTICS

Search for better forming method

CONVENTIONAL injection moulding procedures for thermoplastic materials are confined to those mouldings which are relatively thin and which have no large changes in section. Mould design *is often made more difficult* because of a need to ensure relative uniform section thickness to enable accurate and sound mouldings to be produced. As section thickness increases, moulding cycle time rapidly rises and injection moulding is seldom economic with material thicknesses *in excess of 3 mm.*

Many possible applications of thermoplastic materials are ruled out because of the limitations imposed by injection moulding and processes which can extend the use of such materials are being sought.

Increasing attention is being paid, particularly in the U.S., to rapid production of thermoplastic products by solid phase or melt phase compression forming. In these processes, thermoplastic sheet material is formed in heated tools to produce finished mouldings.

PERA is setting up a group sponsored project to determine the influence of these forming techniques on the properties and performance of thermoplastic and reinforced thermoplastic materials. Economic data on forming procedures will be established and compared with alternative methods.

Benefits resulting from successful completion of the project will include the facility to produce thick-section mouldings in thermoplastic and reinforced thermoplastic materials with satisfactory properties and performance.

A bonus will be the capability of incorporating much greater variations in material thickness in the product. This will result in considerable reductions in complexity and cost of moulding *tools and allow designers a much* greater freedom to incorporate desirable characteristics in the product.

Materials Forming and Treatments Dept., R and D Division, PERA. Melton Mowbray. Leicestershire, LE13 0PB. Melton Mowbray (0664) 4133.

Welds sheet or tiles

SWISS-BULIT motorised hot air plastic welding equipment which can be fitted with a range of accessories for carrying out 40mm overlap or tape welding, melt welding, and 4mm seam jointing, has been introduced by Welwyn Tool Co.

Typical overlap and tape welding applications include the manufacture or repair of marquees, sunblinds, tarpaulins (including customs sealing), roofing, damp course sheeting, etc.

Seam jointing is most commonly used to seal the gaps between pvc floor tiles, especially in kitchens, operating theatres, and other areas where hygiene is important.

The basic rig, called Variant, has a compact, lightweight chassis fitted with a variable position hot air gun and an electronically-compensated infinitely variable speed torque motor which is capable of maintaining a constant predetermined rig velocity under changing load conditions, such as when travelling uphill or over uneven surfaces.

Both gun and motor may be powered by a 110v or 220v mains supply. Two driven wheels are mounted at the rear of the rig, whilst the front wheel can be swivelled to facilitate turning, and is adjustable for height.

Various plug-in heating elements are available for the hot air gun, giving a choice of temperatures up to 600°C suitable for all common plastic sheet and foil materials. An extensive range of nozzles may be attached to suit any application, and these are selected in conjunction with the pressure roller, which is also interchangeable. For tape and seam welding, reels of the appropriate material are mounted vertically on a spool at the top of the rig.

Welding speed is variable up to 12m/min, depending on application, type of plastic, and material thickness. For corners and awkward areas, a hand blow gun is also available. A power groover, hand chamfering tool and spatula are additional accessories for seam welding.

Welwyn Tool, Stonehills House, Welwyn Garden City, Herts. 9629121.

● MATERIALS

Stronger when hot

MARKETING has started in Britain of Aerolor carbon fibre/carbon composite materials developed in a joint programme between Le Carbone-Lorraine and SNI Aérospatiale.

They are built up on the basis of a high modulus carbon fibre preform used as the reinforcement and matrix of pyrolitic carbon.

Several methods are used to densify the fibres. One of these is chemical vapour deposition, or CVD, in which methane or some other gaseous hydrocarbon is decomposed in situ around the reinforcing fibres. The deposited blanks can be graphitised at temperatures above 2,500 degrees C.

To CVD can be added impregnation with furanic resin or pitch followed by graphitisation.

Forging of the blanks consists of applying *unidirectional* pressure at a temperature higher than 2500 degrees C.

Applications are anywhere a user needs particularly high resistance to thermal shock, ablation-resistance etc., but cannot accept a weight penalty. One is in aircraft braking *systems with temperatures* up to 1,300 degrees C and very low wear on rubbing surfaces.

One remarkable property of the materials is that their mechanical characteristics are double at 2,500 degrees C. compared with values at ambient.

Le Carbone-Lorraine, BP No. 31, 41 rue Jean Jaurès 92231 Gennevilliers, France.

● HANDLING

One man loading

THREE portable general purpose fork lift loaders and two heavy duty industrial models, all manually operated, have been added to its MIT range by Ezi-Lift of Slough, Berks.

The loaders have a lifting height of up to 1.06 mm and a loading capacity of 125 kg, yet weigh only between 23 kg and 28 kg. They need to be operated by one man only and, being portable, can be carried in a van.

Both models in the industrial *truck range weigh around* 52 kg and have a lifting height of 1.06 mm with a loading capacity of 270 kg. Castor wheels on one model increase mobility and ease of handling, making it particularly useful where open floor space is restricted.

A patented "deadman's handle" holds the load safely in position if the lifting and lowering handle is, for any reason, released.

Distributor is Market Place, 8, Dean Court, Kingston Road, Tolworth, Surrey (01-337 0912).

● NORTH SEA OIL

Testing a sub-sea system

COMEX SEAL has started the practical testing of the newly designed subsea wellhead instal*lation and maintenance system* (SWIMS) from the semi-submersible drilling rig Kingsnorth U.K., approximately 10 miles off the coast of Aberdeen.

The tests will seek to demonstrate the capability of establishing and servicing subsea wells from surface floating facilities using guidelineless techniques in deep water areas. Compatible with most wellheads currently manufactured using split and single tree design, the system has been developed by Comex Seal in conjunction with former Seal shareholders.

The practical tests involve the sinking and cementing of a 100 foot stump into the seabed by *the Kingsnorth* UK. Then, 25 engineers and technicians will install a dummy Christmastree and perform guidelineless re-entry, workover and function tests utilising newly developed tools.

The tests are expected to last in the region of 10 days and will be *attended by engineering* representatives of oil companies. The system incorporates a dual bore riser developed by Comex Seal which not only installs the tree assembly but also provides a tie back tool for completion and workover operations on high pressure oil gas wells.

The system is controlled and monitored from a console on the surface facilities.

Comex Seal UK, Nord Centre, York Place, Aberdeen. 0224 572064.

● CONSTRUCTION

Aluminium formwork

THE COST, availability and transportation of timber, for use as formwork in the British building industry, are creating growing problems for contractors. One alternative system — lightweight aluminium extruded beams with a channel designed to hold replaceable timber strips—has, however, been in existence in North America for some seven years.

The formwork system, suitable for wall forming, decking and flying forms, is called Aluma, and has now been launched in the UK by GKN Mills Building Services., Winchester House, 53/55 Uxbridge Road, Ealing, London W5 5SE (01-567 3083).

The beam is extruded from a special aluminium alloy developed by Aluma Systems Inc., of Toronto, in conjunction with Alcan, Canada.

One beam, weighing less than *6kg to a metre has* a span capability equivalent to a "ten-by-four' timber.

These beams can be used with frames, system support or standard props and, because of their strength-to-weight-ratio, they allow larger spans requiring fewer props.

Used as wallforms, the beams are up to 40 per cent lighter than timber/steel equivalents and can be speedily and accurately assembled, says the company, to any shape or size. Thus, the cutting, wastage and skilful assembly associated with stuctural timbers is eliminated.

Although it has taken the company exactly a year to complete its agreement with the Canadians to introduce the product to the UK market, the system has been undergoing field trials here for the last six months. Tarmac is using the beams for its trunk road/underpass Brecon job (and is the first British buyer) McAlpine is using Aluma at the Co-operative Society's new superstore in Blackpool and Wimpey sub-contractor, Ardmill Developments, at Maidstone, Kent, for a local authority building.

Lines the gutters

SEAMLESS aluminium liners which may be used to repair Finlock-style concrete sectional gutters have been developed by Imperial Regenseal (Gutterform), 38 Old Marston Road, Oxford OX3 0JP (0865 48255).

The gutter liner, formed from *uncoated or lacquered aluminium* strip, is said to have a life expectancy of at least 30 years. The long lengths minimise the possibility of leaks and the wide, smooth inteiror sides and bottom of the liner discourage atmospheric deposits, lichen and moss which, when they build up, cause spillage over gutter edges.

Ladders safe on slopes

WOODEN WEDGES, bricks and blocks to level ladders on uneven ground can be dangerous. Levelmatic is a simple and inexpensive device which, when bolted to the bottom of a ladder, automatically adjusts the length of its legs to compensate for uneven or sloping ground, steps or stairs.

The legs of the unit are telescopic and interconnected—as one leg goes up the other goes down. The legs are con*nected by a "ball chain"* made up of a number of steel balls threaded onto a stainless steel cable which passes through a tubular guide linking the legs.

When a Levelmatic equipped ladder is placed in position the legs adjust to suit the ground and are automatically locked by *the weight of the ladder*—the heavier the load the more powerful the lock. When the ladder is lifted, the lock releases and the legs become free to adjust to the ground conditions at the next site. It takes about 20 minutes to fit and is maintenance free. Once fitted, it is automatic and requires no action by the ladder user.

Levelmatic is at 29 Alexander Street, London W2 5NU. 01-221 6565.

Detects leaks in pipelines

WHEN LOCATING leaks in oil, gas and other lines, it has often been necessary to carry out progressive cutting, capping and re-testing. These disruptions can be avoided by using a service offered by the General Descaling Company, Retford Road, Worksop, Notts S80 2PY (Worksop 3211/6).

The service is said to be based on an "intelligent" pig which is inserted in lines from 6-inch diameter upwards, through the test end, and propelled by water pumping to a preselected position.

The pig is then statically pressurised and acts as a seal between two adjoining lengths. In the section containing the leak there will be a pressure reduction.

The battery-powered pig measures the differential and transmits a leak-direction signal that identifies the section containing the leak. At the next position, another measurement is taken with the line under pressure. The leak will lie between the two positions showing oppo*site leak-direction signals.*

As long as there is a flow from a leak, says the company, it will be located to within 1/10 of 1 per cent of the pipe length. The size of the leak can also be determined.

Because of the short search time, detection costs and constructional delays are minimised —leaks that would take months to find by current methods can now be pinpointed in a matter of days.

Accelerates setting of concrete

ALL THE requirements of British Standard 5075 for plasticising accelerators for speeding the setting of concrete are claimed to be met by Cormix FA manufactured by Joseph Crosfield and Sons.

The company says the accelerator is chloride-free and *that it may* be used in concrete containing embedded metal. Moulds and concrete-handling equipment are not impaired by its use

A light brown liquid with a freezing point of minus 10 degrees C, it is stated to comply also with all the requirements of Code of Practice 110 concerning set acceleration in structural concrete.

Details of test results are available from Crosfield's Cormix Division, PO Box 26, Warrington, Lancs., WA5 1AB (0925 31211).

Easy access to roofs

CHIMNEY STACKS, dormer windows and sloping roofs have all inhibited the use of scaffolding for repair jobs, but there is now a lightweight, portable unit which has been designed to cope with the problems of gaining access to protruding roof objects.

Known as the "Readyscaf," the scaffold unit weighs only 32 lbs complete, and comes from Ready Scaffolding, 2a Meadow Road, Sutton, Surrey (01-642 4441).

It is supplied with equipment called Clinometer which is used to measure the angle of the roof to be worked on. Taking the numbered reading from this, the operator then first adjusts the numbered uprights and leg *sections* of the unit to the required settings while at ground level.

The complete unit is then carried to the working area on the roof and erected in position with the specially developed ladder tie placed in position. This tie is also adjustable to any roof angle and ridge, giving complete stability to the unit.

Boards supplied with the unit are added and a working platform, measuring four feet by two feet six inches, is then created. This can hold loads of up to five cwt.

The *company* says that the system can easily be extended by adding more units for use in combination. Two units erected side by side give complete working access to dormer windows and side chimney stacks. Four units used in combination will give complete all-round access to centre chimney stacks.

To prevent bricks, mortar or tools from being accidentally knocked to the ground there is a safety skirting made of Daradon synthetic canvas which gives added safety to each unit.

● COMPUTING

Eyestrain and the display

ALTHOUGH many of the original claims that prolonged work with VDU's presents a health hazard have not been substantiated, or are being dismissed as trivial, some areas of doubt remain—including effects on existing sight problems, and the general ergonomic aspect of this type of operation.

The Post Office is conducting a five-year study of visual effects, involving checks on 450 operators and a control group of similar size. But results will not be available till 1982.

The Ergonomics Society, working with the Applied Vision Association, is to hold a one-day conference on "Eyestrain and VDU's" on December 15 at Loughborough University of Technology.

Computer users and systems designers, health and safety personnel and union representatives will find the event of interest.

Further details from TFM Stewart, Department of Human Sciences, University of Technology, Loughborough, Leics. LE11 3TU.

● PROCESSING

Viscous fluid pump

DESIGNED particularly for higher viscosity fluids, or for the dispensing of large volumes oil for industrial applications, is a pump which can be mounted in oil company standard drums *or tanks.*

An air-operated motor is directly coupled to the pump, the former being equipped with rectilinear valve gear to ensure optimum efficiency in the use of air which may be from 3 bar up to a maximum of 12 Bar.

The high volume pump is one of several new products to be featured at the Motor Show in Birmingham by Tecalemit Garage Equipment Company, Belliver Industrial Estate, Roborough, Plymouth (0752 701212).

Victoria and Albert

Mad Ludwig's moving fantasy

by DAVID PIPER

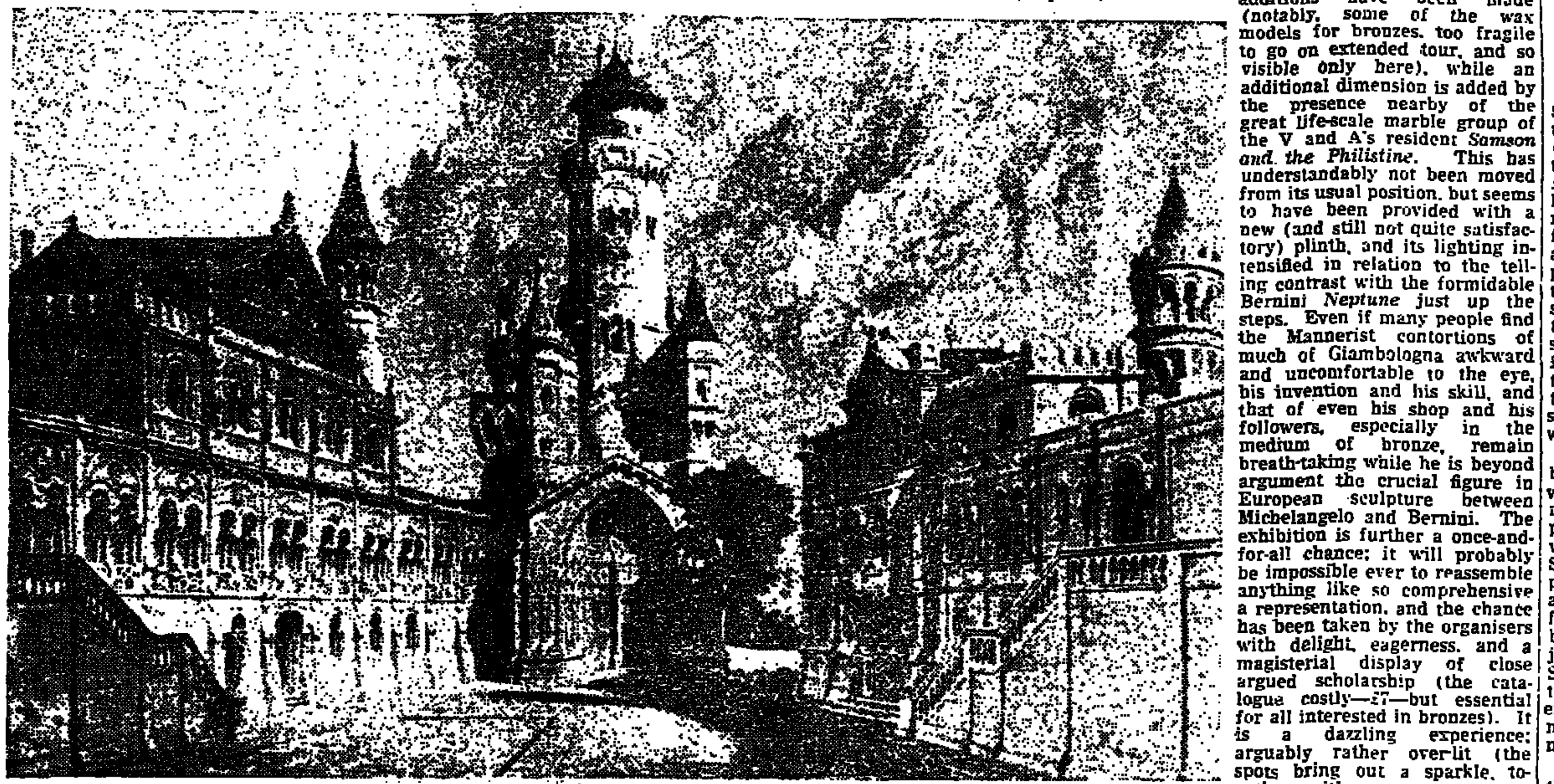
Ludwig II of Bavaria is not, for all the formidable excess of his career, and even though Visconti's film *Ludwig* has just reached London if six years late, a household name in Britain, but to bring to life the exhibition, *Designs for the Dream King*, at the Victoria and Albert Museum until December 17, the visitor does need know something about him. Wagnerites of course are informed of the capricious and demanding nature of Ludwig as the composer's prime patron; students of eccentricity pushed to its extreme will recognise him as a star in that particular dizzy firmament, while there has also been one admirable recent popular biography in English (Wilfrid Blunt's *The Dream King*, 1970). Art historians may remember the extensive exhibition, in Munich 10 years ago, of his achievement as patron of the arts. Never before though has Ludwig travelled outside Germany, while those who have not travelled in Bavaria may find it hard to realise that a high proportion of the designs (lent from Schloss Nymphenburg) for his dream-castle-world were actually realised in towering and pinnacled stone, in carved wood, gilt, silks and all manner of precious materials, enhanced not least by the advantages of the new technology, such as electric light.

Ludwig was hereditary ruler of Bavaria: his family had ruled it since 1180. He reigned between 1864 and his death in 1886. With an unshakeable belief in the divine right of monarchy, he set out to re-create Versailles, claiming the Bourbons as his true spiritual heirs, but also merging into his overall vision the German Gothic past, the rococo of the Munich Residence, and the Wagnerian present. His sequence of castles became the sets, a sort of solid-state opera of mad imagination, for a restless life of fantasy as he moved from one to the other. The tedious chores of kingship became insupportable, as his creative imagination broke free, leaving estimates of expenditure shattered on the floor—in the year of his death estimates of 37,000 marks on works transcended by a majestic actual expenditure of near 4m. It was all too much; it was not only mad, but in practice proved certifiably insane. Certified, alienated, forthwith incarcerated, Ludwig was next day found drowned in the Stambergersee together with the body of one of his guardians. He was 40 years old.

For this scenario the exhibition provides essentially a fragmentary blue-print. It is confined to drawings and watercolours, entirely two-dimensional; floribundissima though many of them are, they do provide the question whether this message might not be presented to as good if not better effect in book form. In their kind, many of them are of high quality, but mostly of a kind that does *not* lose much in reproduction while many do need fairly elaborate verbal commentary. At the exhibition you can buy (for a reasonable £2.95, but to that must be added £1 entrance charge), a well-composed and illustrated booklet, including two illuminating essays by Gerhard Hojer and Simon Jervis, with a catalogue. The catalogue however is of the illustrations in the booklet, and these do not reproduce every item in the exhibition (which has brief and unnumbered labels). One or two of the most curious exhibits are in fact omitted—notably, a watercolour by Fidelis Schaber of the Venus Grotto in its first form at Neuschwanstein, about 1875. This is not to be confused with the two versions of the Grotto, as elaborated and translated to Linderhof, in two watercolours by Heinrich Breling, 1881 — these are reproduced in glorious technicolour, one lit raspberry-ice-pink, the other deep ice-pantomime blue (though actually rigorously checked by Ludwig for colour against the Blue Grotto at Capri). The earlier version, though less spectacular, I found most moving: it is brought to vivid if desolate life by the presence in it of the figure of a prim gent of 1875, seen from behind amongst the stalactites, standing in his black frock-coat, top hat, slender cane (virtually the Baudelairian heroic uniform of modern times). One hand is folded genteelly behind his back, as he considers before him the depiction of a scene of unbridled lasciviousness: in fact Tannhäuser in the Venusberg. This I found indeed stirred echoes of Wagnerian thunder in the mind, but the figure in it provides a poignant link with the real world. After it, the other drawings, mostly unpeopled, seemed void, and their remoteness from reality too great, even when realised like designs for that of the upper courtyard of Neuschwanstein. They constitute though a vision not to be missed, to be followed up perhaps by the planning of a Bavarian itinerary for next holidays.

The other, major, event at the Victoria and Albert is the exhibition of sculpture by Giambologna. This was noticed in these columns by William Packer in its first showing at Edinburgh: it is in London till November 16, and thence goes to Vienna. Some additions have been made (notably, some of the wax models for bronzes, too fragile to go on extended tour, and so visible only here), while an additional dimension is added by the presence nearby of the great life-scale marble group of the V and A's resident *Samson and the Philistine*. This has understandably not been moved from its usual position, but seems to have been provided with a new (and still not quite satisfactory) plinth, and its lighting intensified in relation to the telling contrast with the formidable Bernini *Neptune* just up the steps. Even if many people find the Mannerist contortions of much of Giambologna awkward and uncomfortable to the eye, his invention and his skill, and that of even his shop and his followers, especially in the medium of bronze, remain breath-taking while he is beyond argument the crucial figure in European sculpture between Michelangelo and Bernini. The exhibition is further a once-and-for-all chance: it will probably be impossible ever to reassemble anything like so comprehensive a representation, and the chance has been taken by the organisers with delight, eagerness, and a magisterial display of close argued scholarship (the catalogue costly—£7—but essential for all interested in bronzes). It is a dazzling experience; arguably rather over-lit (the spots bring out a sparkle, together with a most sensuous gleam, in the bronze, but lose some detail in heavy shadow) but displayed with great elegance, and very informative grouping. Bronzes are by their nature reproducible—reproductions of some of the models here were being made into the 1930s—and the V and A has even met that challenge. Two reproductions have been made in bronzed resin, which sounds horrendous. The *Mars* however is both highly accurate, acceptable in colour and (unexpectedly) about right in weight in the hand even if the feel is not that of bronze. At £70, it is not at all unreasonable.

David Piper



Design for the upper courtyard of Neuschwanstein, 1871

Woody Herman playing at Chichester

Sanyo Jazz Festival

Herman at Chichester

by KEVIN HENRIQUES

The five-day, seven concert Sanyo Jazz Festival at Chichester, which ended on Sunday evening, was almost certainly the first fully commercially sponsored jazz festival to be held in this country. There was no backing, in name or money, from the Arts Council, local arts associations or the ratepayers of West Sussex. Sanyo, the Japanese company which specialises in what could be termed the 'hardware' of the sound business, decided to sink £35,000 into its first venture of this kind in Britain. Apart from ticket sales and subsidiary items such as programmes, etc., there was no other source of income.

Impressions gained during a brief visit indicated that Sanyo was pleased with its investment, even though it seems probable that the final accounts will show a small loss. Of course Sanyo was not striving for huge profits. Indeed if any surplus accrues from this or future festivals it will be ploughed back into the grass roots of jazz in ways yet to be decided. Sanyo's aim was publicity for the company (which it received extensively) and to begin to make the name Sanyo synonymous with jazz in this country.

Inevitably and unsurprisingly the artists chosen to perform were safe box office attractions, particularly the visiting Americans. The solid centrepiece was the latest version of Woody Herman's Young Thundering Herd which performed at five concerts.

The laudable intention was to mount a retrospective covering Herman's 40 years in jazz with part of each concert devoted to a different period in his bandleading career. But at the three concerts I attended this interesting concept seemed to be forgotten with only a couple of items included from the relevant era.

Still it is always exhilarating to hear a Herman Herd. This one is an enthusiastic, tight, expertly drilled unit, mainly youngsters, with a scorching trumpet section and four saxes who vividly evoke the jumping lyricism of the renowned "Four Brothers" of the mid-1940s. The band soloists are polished without being sensational. Pick of them was diminutive baritone-saxist Gary Smulyan and trumpeter Glenn Drewes.

Sarah Vaughan was the other American visitor (Chicago-born tenor-saxist Bud Freeman doesn't count—he is now a naturalised Briton). At her first concert, though recovering from an extended journey caused by fog (yes, she did sing "A Foggy Day in Chichester Town") and intially dissatisfied with the sound, she was in immaculate form. Like good wine, jazz singers seem to get better with age and the divine Miss V, at 54, maintains a remarkable consistency. Her magnificently controlled vibrato, her range and technical command are a continuing wonder. Though mindful of the claims of Ella Fitzgerald the view must be advanced that Sarah Vaughan is the outstanding jazz singer of the day.

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Equally outstanding in his own special way was Stephane Grappelli, truly the effervescent nonpareil of the jazz violin. The joy this always welcome visitor from France communicates by his zestful music and his platform comportment are practically unmatched by any other living jazz musician.

His swinging violin playing is as elegant, as poised, as beautiful as ever, his tone simply gorgeous. He is no slouch as a pianist either as he showed in a solo spot. He later joined Woody Herman and his Herd for "Satin Doll" and "Beale Street Blues"—unlikely pairings such as this are the real stuff of jazz festivals. Both veterans were clearly moved by the experience.

The other non-British group was Colours, an international electronic quartet, led by German bassist Eberhard Weber, which was high in decibels but light in emotional content. Brilliant but clinically played with detachment. Colours' music is for the intellect rather than the heart or soul.

Britain's electronic contribution was the highly percussive septet Paz in which warm altoist and flutist Ray Warleigh seemed redundant in front of the wall of sound built by the rhythm men and percussionists.

There was also an effective performance of Stan Tracey's *Under Milk Wood Suite* with actor Donald Houston bringing the right measure of intensity to Dylan Thomas's words but never over-dramatising them, and Tracey's quartet reminding us once again of music which has become a solid part of British jazz history. The Humphrey Lyttelton band and the Ronnie Scott quintet completed the roster of performers which was sanely manageable, unlike similar events held in Europe.

Audiences for the concerts held in the Festival Theatre, which seats just under 1,400, were always enthusiastic and appreciative. Whether this was a local festival outside the theatre is debatable. In Chichester itself involvement, participation or awareness of the event did not seem at a high pitch. No doubt Britain's proudly prehistoric licensing laws precluded any post-concert musical activity, organised or spontaneous, in the town. But surely there could have been *some* live music in the theatre's restaurant, open each night after the concerts? It would at least have taken one's mind off the dismal food.

Coliseum

All for Paul

by CLEMENT CRISP

Paul Clarke's death two years ago inspired in his friends and colleagues the desire for a finer memorial to him than bare inscriptions on marble. Led by Patricia Ruanne and Kerrison Cooke, they decided on a fund to provide teaching for young and gifted dancers, and with prodigious efforts in their own time they have raised £15,000. The sum needed for the Paul Clarke Memorial Fund is twice that amount — I would urge you of your charity to send a contribution to the Fund at the Royal Academy of Dancing, London, SW11 — and the gala at the Coliseum on Sunday was yet another step towards that goal. Svetlana Beriosova, beautiful in red, made a touching opening appeal, and the participation of many dancers was framed by excerpts from *Prodigal Son in Ragtime*, the ballet which is so closely linked with Paul Clarke's bright young talent.

The planning of the programme deserves every praise: the items are too many to describe in much detail, but there were enough special treats to satisfy even the most jaded gala audience.

From the Royal Ballet Marguerite Porter and Wayne Eagling in an adagio from Michael Charnley's *Symphony for Fun*: Alfreda Thorogood and David Wall in a duet from *Voluntaries*, and Lesley Collier and Festival's Kerrison Cooke in *Concerto's* slow movement, were all very fine.

Ronald Emblem with a supporting cast from both Royal and Festival Ballets tripped through Widow Simone's clog-dance, and as fascinating prelude to this we were shown a duet from the Imperial Russian version of *La Fille mal Gardée*. This was from the production staged a decade ago in Ljublana by Alexandra Balashova, an illustrious ballerina in pre-revolutionary Moscow, and recorded in Benesh notation.

I reported on the staging in these columns: seen again in performances by Margaret Barbieri and Stephen Jefferies, the pas de deux is a delight, full of an innocent bravura buoyantly presented by Barbieri and Jefferies.

The comic relief always needed to separate the virtuoso numbers in galas came from Nola Rae, a mime of mad cap zaniness, who battled with the *Sylvia* pizzicato and, I feel, probably won on points. Very jokey, too, was the appearance of Brenda Last, Peter Darrell and Gordon Aitken in Kenneth MacMillan's excursion for three bathers, *Valse excentrique*.

Sally Owen and John Chesworth of Ballet Rambert presented Sara Sugihara's *Window* Cherry Gillespie and Wayne Sleep sang about pianos and then danced; Petra Siniawski brought a new solo to music from *Fancy Free*, and Rina Schenfeld showed us a dance with a piece of wood. And as the evening came to its end, two last duets were there to tickle our palates even further. Niels Kehlet, star of the Royal Danish Ballet, appeared with Lise Stripp in *Flower Festival at Genzano*.

And to jerk a few tears, and make some of us feel older than a boat in *Wedding Bouquet*, Christopher Gable deserted the drama to return to the ballet stage and partner Lynn Seymour in the last duet from *Two Pigeons*, which they created 16 years ago. They were splendid, triumphing by artistry over partnering difficulties.

Elizabeth Hall

ECO/Thomas

The double-bass might have sung melodiously and grunted grotesquely. Faced with the task of composing a double-bass concerto, Richard Rodney Bennett has enough skill as an entertainer to have chosen that way. Alternatively, he might have employed the extremes of avant-garde technique — slapping strings, *glissando*, freakish high notes, electronics and the rest. Instead he has written a restrained, "straight" concerto (in the 12-note method, or something very like it) and I regret to have found it merely tedious at its first performance on Sunday night.

Using an accompaniment of only oboes, cor anglais, two horns and strings, it was composed for the eventual winner of the double bass contest recently held in the Isle of Man. Jiri Hudec of Czechoslovakia having emerged as victor, it was he who gave this performance with the English Chamber Orchestra under the American conductor, Michael Tilson Thomas. Though Mr. Hudec was able to exhibit his prodigious and apparently unflappable powers, throughout its three movements, the music itself prevented any such exhilaration as I felt at Mr. Hudec's solo recital five weeks ago.

Mr. Thomas enriched the evening, however, by a beautifully flowing performance of one of those "lesser" Haydn symphonies which are generally neglected only because the composer's fertility gave us so many incontrovertible masterpieces of the first order. The symphony no. 81 in G proved a delight. Its slow movement, a set of variations, has a theme graceful enough to adorn Haydn's famous (and later) London symphonic set; and its scherzo reinforces its rough vigour by twice cheerfully defying the accepted rules of musical grammar. One could hardly avoid the image of the composer giving a deliberate and naughty wink.

The central "Trio" of this scherzo, with its drone-bass and artless tune, evokes a rustic band. I wondered accordingly if Mr. Thomas had placed the symphony as a purposeful forecast of Beethoven's *Pastoral Symphony* at the end of the programme. Historically justified though it may be to perform the *Pastoral* with a smallish orchestra (about 24 strings), the sound is odd today—and perhaps the lack of a rich, glowing tone was responsible for some hurry on Mr. Thomas's part, as though from the first "arrival in the country" he was too concerned with the bus back to town. But on its own terms the ECO is playing very attractively these days, and in Mr. Thomas it has a guest conductor worth cultivating.

ARTHUR JACOBS

Round House

Warsaw Music Workshop

Two important promoting bodies for new music joined forces on Sunday afternoon to present the visit of the Warsaw Music Workshop to England: the new Macnaghten Concerts (the recently reincarnated version of the Lutyens-Lemare organisation) was featuring the group in its current series of concerts including East European music, while the Arts Council Contemporary Music Network was launching the group on a nation-wide tour which will take it to Leicester, Huddersfield, Bristol, Cardiff, Nottingham, Birmingham, Derby York, King's Lynn, and Wavendon—in all of which places it should not be missed.

The Workshop has had its present form of a versatile quartet of cello, trombone, clarinet and piano for some ten years now, and it was evident in their long, diverse but not over-demanding programme that there is no common factor in the music they play except the inspiration provided by the group's four virtuosi. No less than ten pieces were given, interspersed with film of three more (plus one superfluous repeat).

Planist and director Zygmunt Krause has clearly formed and nourished this group, and his own two pieces contained the concert's most delightfully inventive sounds. Each featured tape of natural sounds—voices, farmyards, wind (to which the Round House helpfully added Inter-City trains)—interspersed with the playing of quartets of similar instruments by the group. The quiet interactions of mini-cimbaloms and humming glasses in *Soundscape* made a more potent effect than the more lavish bagpipes, flutes and hurdy-gurdys of *Idyll*, but each piece made a telling point about artificial and natural sound.

Acute observation of sound quality seemed to underpin several of the other trifles—some no more than studies, preparatory thoughts for a piece. Vidovszky's *78/5/28*, a brief clank of manually dampened piano sound: Serocki's *Swinging Music*, an entertaining reduction of jazz to its purely rhythmic elements, expressed in terms in noise; or Kotonski's *Pour Quatre*, a curiously co-ordinated essay in free playing—all these made one small point, interestingly and unpretentiously.

I took strongly against Tilo Medek's "swan-song for town musicians," *Stadtfeifer*, with its ever-wilder eruptions from the piano (which made something very like smoke rise from the instrument) and Gorecki's *Musiquette IV*, though each demonstrated the players prowess and patience brilliantly. But *Matinata* by Ivana Loudova was a delicious evocation of Monday-morningness: drifting dreams rudely dispelled by a penetrating alarm clock. I hope the Workshop make a film of that piece with the same imagination with which they filmed Krause's two little experiments in pianistic texture, *Stone Music* and *Glove Music*.

NICHOLAS KENYON

Palladium

Leo Sayer

After the stiffness of Barry Manilow at the Palladium all last week it was a relief to welcome the oh so loose Leo Sayer on the same stage on Sunday. Mind you there were times when you wish that Sayer would keep his hands and arms and legs and feet a bit more in contact with his body: *Moonlightin'* is a sad song and not at all improved by a series of mimes that make a charade of it.

But with such a strong repertoire of songs, and a sure falsetto voice Leo Sayer can hardly go wrong. Few artists can follow a moving and introspective song like *Giving it all away* with a disco hit like *You make me feel like dancing* and make both equally effective. It was the same at the end of the concert when his latest hit *I can't stop loving you* was topped by *Long Tall Glasses*, with Sayer hopping around the place like a white suited fly on hot cinders.

I find the frenzy, the Charlie Drake-like fooling of the little man, hard to take. When Sayer says he is in a "silly mood tonight" you sink a bit lower in your seat. But when the clowning is kept in check Sayer is in a class of his own, switching from pathos to exuberance, and always keeping the eyes transfixed: it is only the self-parody, the unsure clowning, that stops him being the international superstar that his material and his singing demands. With a very professional, if rather antiseptic, band in support he carried the evening. His shout at the end that this had been the most satisfying concert of his career might have been slightly exaggerated, but there is no denying his talent, and his ability to deliver the very best in contemporary music.

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Unanswered questions

BY THE end of this month, according to the declared timetable, the member governments of the EEC must take the fundamental decisions necessary to set up a European Monetary System. The Finance Ministers met yesterday to delve still further into the technical questions about the exact mechanism of intervention in the exchange markets implied by such a system. Unfortunately this barren dispute has taken up almost the entire time of those involved since the initiative in Bremen in June. As a result the Prime Minister, *when he visits Bonn later this week and Paris next* week, will have the opportunity to raise a whole series of fundamental questions which have yet to be answered —or even to be asked.

National objectives

The most fundamental question is simply what is the purpose of setting up a union in the first place. This is not a matter of ensuring that all the participating countries have the same national objectives in joining. In such a union some members may hope to find more reliable markets for their goods, and others more stable *monetary conditions. However, it is important to decide* on the objectives of the institution itself. It could be, as the Commission wishes, a step towards closer *economic and well as monetary union: this raises* questions about the co-ordination of fiscal and monetary policies which have not so far even been discussed. *Failing some effective steps to secure convergence, the* union will inevitably turn into a kind of European Bretton Woods, in which members can at best hope to find a source of balance of payments finance.

Of course, this is not even a caricature of Britain's intentions in joining in the discussions leading to an EMS. On the contrary, the Prime Minister, like M. Barre in France, sees the act of joining as a public commitment to stability which may help to influence market behaviour, both in the exchange markets and round the wage bargaining table. Indeed, the fear that a refusal to join would be construed as a confession of weakness and provoke an immediate crisis provides one of the strongest practical arguments for British participation. All the same, the outcome does not always mirror the intentions of those involved. Adjustments inside the present snake have been quite frequent, and cumulatively large in some cases. Officials who are aware that any system of obligatory intervention positively invites speculation speak of the need for early, frequent and modest adjustments inside an EMS. It is hard to see how a regime of frequent adjustment would impose discipline or discourage speculation.

The reserve role

Indeed, it is not only doubtful whether much would be gained by *joining a mini-IMF; such an arrangement* might very well have a short life. Inside the snake it has been possible to manage a cumulative movement *of 17 per cent in the Norwegian kroner, for example,* because this currency is not widely traded. A fear of a similar movement for sterling would pose very *different problems. Sterling is widely traded and widely* held.

In as far as the rules for intervention are a central issue, *the question of financing capital flows—and the related* question of how far exchange controls can be justified inside a European system—are of far more substance *than the present arguments over grids and baskets.* The present debate is partly over the trivial matter of whether the weak or the strong currency authority should more actively intervene when market pressures demand it—in other words, whether the resultant debt should be denominated in the weak or the strong currency. This should only be of pressing concern to potentially weak members with low reserves. The more important issue is how much freedom of movement the EMS should countenance; but this is being debated out of its necessary context. Tight limits can only be maintained by economies which have converged.

The central question which the Prime Minister should raise in his discussion is not, then, the size and terms of credits available, or the precise rules for applying them, but the question of common economic policies. Policies will have to be broadly consistent with membership of an EMS if the system is long to survive; real policy co-ordination would make the whole exercise worth while.

There are three issues involved here: the linkage of monetary policies; the development of fiscal policies *in a European context; and what has become known* as the transfer of resources—that is, an effective and equitable use of the EEC's own Budget. The first of these is the most pressing question, but fortunately the least difficult. Under floating exchange rate movements respond sharply to any errors in monetary management, and already the UK has been forced to tighter policies and Germany to more relaxed ones than would otherwise have been likely. The gap can be bridged.

Locomotive theory

Co-ordinating fiscal policy is likely to be more difficult, both *because of existing prejudices and because the* objectives are less easy to define. Initially there could be strong pressure on the stronger countries to expand *fiscally more* than they would wish in order to take the sting out of anti-inflationary policies in the weaker countries—the locomotive theory in a European context. The idea that one can deflate without reducing the total pressure of demand is an illusion which seems to die hard in such negotiations. On the other hand fiscal policies ought to be drawn up on a European basis. The need to avoid excessive *deflation in total*, and the need to produce convergence in performance, may require some relaxation from the strong countries, if not a full *locomotive effort. Planning will also be complicated by* divergent business cycles, which should be accommodated, not suppressed.

The question of the EEC Budget and the reform of the agricultural policy has defeated good intentions for many years past, and clearly cannot be solved suddenly as part of a hurried negotiation for the EMS; the most that can be achieved here is a serious declaration of intent, with a symbolically helpful initial gesture. However, fiscal and monetary co-operation should be on the *agenda now; and objectives for exchange rate* stabilisation could then bear some relation to progress on the fundamentals. If Mr. Callaghan can widen the EMS agenda in this way he may set back the timetable by some months—which seems likely in any case; but he will greatly have improved the chances of an outcome which is both technically durable, and likely to make a worthwhile contribution to progress in Europe.

WHITEHALL AND THE NEW ROCHE PLANT

The international hard sell

BY JOHN ELLIOTT

THE ANNOUNCEMENT yesterday that Hoffmann-La Roche is to build a £140m vitamin C plant in Scotland *marked the end of several* months of hectic activity for the UK Government which has been *bidding since early this year to win the investment and jobs* involved for Britain. Eventually it was a package of nearly £46m state aid that clinched the deal and stopped Hoffmann-La Roche reviving an earlier plan to build the factory in Switzerland, the company's home base.

During these months the British Government has been engaged in a fairly new sort of *activity. It involves Ministers* and civil servants acting as international industrial negotiators, with Government industrial aid as their main weapon.

Because of this the deal is specially significant since it shows two important ways in which Government aid to industry has developed during the past few years. (Both ironically *stem from initiatives first taken* by the last Conservative Government: their future must now be in doubt if the Conservatives win the next *general election* and set about gradually dismantling the present intricate structure of Government support for industry.)

The first is a new role that has been developed by the *Department of Industry* to attract inward investment to the UK, building on the work of the Department's Invest in Britain Bureau that was set up in a small way by Mr. Christopher Chataway when he was *Minister for Industrial Development* in 1972-74. The second is the use of special selective aid schemes which have been built up from the Conservatives' 1972 Industry Act and which are providing £18m of Roche's £46m *State aid through the Government's* Selective Investment Scheme.

The Invest in Britain Bureau, which now has about 40 staff, operates within the Department's regional support and inward investment division.

From this base the Department has adopted a more positive attitude towards attracting foreign business and the Roche project is one of several *examples where it has taken* the lead with Whitehall Departments and other interests in preparing bids.

One of its first successes was winning a £100m Hong Kong power station order for turbine generators from GEC and other equipment earlier this year.

Industry Minister, Mr. Alan Williams: in charge of inward *investment matters.*

Negotiations on the deal started with a meeting in March last year between Sir Lawrence Kadoorie, chairman of China Light and Power, a partner in *the client company, which owns* the power station. Mr. James Callaghan, the Prime Minister, and Mr. Alan Williams who, as a Minister of State for Industry, is in charge of inward investment matters. Specific proposals were developed later and Mr. John Lippitt, a Department *of Industry deputy secretary* with general industrial policy responsibilities, played a central role in leading the UK negotiating team.

The involvement of senior Ministers—and even the Prime *Minister—in major investment* projects is not of course all that unusual. Mr. Callaghan played a personal role in the negotiations that led a year ago to Ford Motors deciding to go ahead with a £180m engine plant at Bridgend in South Wales—helped with approaching £100m of State aid. But what is new is the idea of the Industry *Department's civil servants adopting* a leading interventionist role.

The substantial carrot that the Industry Department civil servants can produce is the plethora of selective industrial aid schemes developed since 1972, in addition to ordinary regional aid, to encourage industries to modernise them*selves.*

Then there are some general-purpose *schemes covering areas* such as energy conservation and process developments, the largest of which is the £150m selective investment scheme *used for Roche. This was set up* nearly two years ago to take over from an earlier accelerated projects scheme and its object is to stimulate investment projects of benefit to the UK economy. Thus it can be *used to persuade a company to* build, enlarge, or accelerate the construction of a factory that might otherwise have been abandoned, built on a smaller scale, or delayed for some years. In the Roche case it meant *persuading the company to* build in the UK instead of in Switzerland and to enlarge the size of the project from an initial £40m.

The Roche project brings the total support promised so far by the Government under the scheme to £70m spread across *106 projects with a total investment* of £707m. A further 226 projects are being processed by the Department's Industrial Development Unit which vets schemes and then passes them for approval to the Department's part-time Industrial Development Advisory Board, comprising industrialists, trade unionists and other outsiders. A *total of £160m aid is being* sought for these 226 projects which account for a potential total investment of £1.7bn.

Both these sets of figures for the projects approved and the outstanding applications indi*cate that there is normally a* ratio of 1:10 between the Government aid and total project cost—a ratio that the Government had to exceed in the Roche case, where there is £18m aid for a £140m investment, in order to secure the project for Scotland.

The Roche aid is the largest so far under the scheme, although there are believed to be some other similar sized projects under consideration. *The previous largest was £10.5m* aid for Unilever towards a £100m. Thames Board Mills development at Workington, Cumbria, which also received £20m regional aid.

Environmental complaint

The story of the plant that Roche is now to build in Scotland goes back some five years to 1972 when environmentalists halted a plan to build a new vitamin C factory at Roche's existing Swiss works at Sisseln. The complaints stemmed from the salts effluent that the process causes (which will be less serious at Dalry, near the Scottish coast) and waste steam *from the plant's boilers.* There was a series of court cases and *by the time these were finished* in 1973-74 the market had changed and Roche decided to postpone its plans.

Since then Sisseln has been a candidate for the plant along with other sites including *Village-Neuf in Alsace and loca*tions in the U.S. and Italy. Then in May this year, at a time when Roche was considering a £40m extension of its Dalry plant, Mr. Alan Williams sat next to Dr. Alfred Hartmann, the company's deputy chairman, at a dinner in Basle given to promote the Department of Industry's Invest in Britain Bureau.

Dr. Hartmann raised the question of possible Government aid for a larger £100m project at Dalry *and from this* the £140m project grew. The British Government team, led by two senior Industry Department civil servants, and including the Department of Health and Social Security and the Scottish Office, was then put together and prepared its bids.

The regional aid is fairly automatic on a proportional basis in an area like Scotland, but the selective investment scheme aid is highly negotiable and at one stage three *months ago it* had to be raised to placate Roche and so finished up above the 1:10 ratio. At one stage a senior civil servant paid a flying visit to Switzerland to sort out problems with the board and *even at the end of last week* there was a last minute panic when the EEC Commission in Brussels failed to give the industrial aid the go-ahead as fair under the Community's competition rules. Mr. Williams yester*day was highly critical of the* "rather inefficient bureaucracy" that had let the Commissioner responsible, M Vouel, hold this up until he was contacted, at the UK Government's request, by Mr Roy Jenkins, the Com*mission president, on Friday.* The problem was that Roche, which thought it had a deal some weeks ago, had become impatient and threatened to reconsider this week siting the *factory in Switzerland if* approval was not received.

More State aid

For Roche the development in Scotland is a useful demonstration of a multi-national boosting an area of high unemployment. It also helps to rebuild relationships between *the company and the UK Gov*ernment after the valium and librium prices battle of a few years ago—in which Mr. Alan Williams, then at the Prices Department, played a major role. The company is also getting far more State aid than it could in many other places although this is partly needed to offset the fact that the *British construction* industry will take 25 per cent longer to build the factory in Scotland than would be needed in Switzerland. Mr. Williams said yesterday that he and his civil servants are constantly told on visits abroad, especially by oil companies, that one disadvantage that has to be offset by State aid is the slowness of Britain's builders.

A spokesman for Roche said last night that without considerable *Government aid* it would not have made sense for Roche to develop in Scotland. Certainly the Ministers and civil servants that have made up the new style government negotiating team on the project con*stantly feared that Roche might* return to Sisseln. Whether as a consequence they raised their selective aid bid more than they needed to may never be known. In Whitehall yesterday they seemed sure they had achieved *a considerable coup.*

Healthy demand for vitamin C

BY SUE CAMERON

HOFFMANN-LA ROCHE pioneered the synthetic manufacture of vitamin C on a commercial scale in 1934 and claims to be the biggest producer in the world now.

It already has two major manufacturing plants—one at Grenzach in Germany and one at Belvidere in the U.S. where the annual production capacity is 10,000 tonnes. The new plant *at Dalry, which is scheduled to* come on stream in 1983, will have a production capacity of 40 tonnes a day.

Total current capacity for vitamin C production in the non-Communist world is estimated at over *30,000 tonnes* a year. But demand is on the increase.

There are now 14 known vitamins: A, C, D, E, K, choline and those in the B group which takes in thiamine, riboflavine, pyridoxine, nicotinic acid, folic acid, biotin, pantothenic acid and Vitamin B12. The point about vitamins is that humans, monkeys and guinea pigs—alone among the animal kingdom—cannot produce any of them in their own bodies. Yet vitamin *deficiency leads to a whole* range of diseases. Lack of vitamin C causes scurvy, lack of B12 causes pernicious anaemia, lack of B2 or pyridoxine can lead to beriberi and a shortage of vitamin A leads to blindness.

Roche markets all the known vitamins and it manufactures all but three of them. The greatest demand—on a world scale—is for vitamin C. One reason for this is that as well as its pharmaceutical and nutritional uses, vitamin C, or ascorbic acid as it is known, is also an antioxidant and is there*fore used in food processing.* Roche Products, the British subsidiary of Hoffmann-La Roche, reckons that about 50 per cent of the vitamin C which will be produced at its Dalry plant will be used for pharmaceutical purposes and 50 per cent will be used in food processing. But in the international market the chief use of vitamin C is as a nutritional *additive to animal feeds.*

Vitamin C is added to fruit and vegetable juices to prevent them going cloudy and to preserve their colour, it is used as an anti-oxidant in beer, it is added to wine, it is added to deep frozen and canned vegetables such as potatoes and mushrooms to prevent discoloration and it is also used as a flour improving agent.

The raw material for making vitamin C synthetically is glucose which is usually obtained from maize. The manufacturing process itself is a *highly sophisticated one because* it involves producing bulk commodity tonnages to pharmaceutical standards.

The technology for manufacturing vitamin C has advanced considerably since the end of World War II and this has been reflected in a dramatic drop in prices. In 1950 vitamin C was selling for £14 7s 6d a tonne. Today it sells for only £4.95 a *tonne and these figures are* at current prices with no adjustment for inflation.

The Dalry plant is expected to employ as many as 430 people and about one-third of them will be graduates or highly skilled men and women. The production process includes five separate reactions and each one has to be carefully controlled. Frequent and rigorous testing is carried out at every stage of the process. Roche has decided that Dalry will have a number of localised control panels—rather than one huge control *board such as that at the Belvi*dere plant. One of the drawbacks to having a single board is the time it takes to reach a reactor vessel and rectify errors when something goes wrong.

Roche is planning to export 90 per cent of the vitamin C produced at the new Dalry plant and it claims this will contribute £38m a year to Britain's balance of payments. The *company already has a* manufacturing plant on the Dalry site and 90 per cent of the vitamins B1 and B5 which are made there are also exported.

Roche's decision to site its new plant in Scotland is an interesting one if only because its relationship with the British Government has a somewhat chequered history. Mr. Alan Williams, Minister of State at the Department of Industry, has been negotiating with Roche over the Dalry deal, yet it was he who was junior Minister for *Prices when the UK forced* Roche to cut its prices for the drugs Valium and Librium.

The price cut was short lived and it is now thought that one of the reasons so many foreign-owned pharmaceutical companies are attracted to Britain—60 per cent of the UK industry is foreign-owned—is the Government's sympathetic attitude on drug prices. Nonetheless, *pharmaceutical prices are lower* in Britain than in the rest of Europe.

One reason for this is that other European countries, such as France, tend to be extremely protective towards their indige*nous pharmaceutical industries.* Not only are drugs felt to be an essential commodity but some countries also believe it is easier to enforce strict regulations on medicine production and advertising if they have to deal with home-based industries.

The UK does not have this *hostile attitude to outside pharmaceutical* concerns and unlike, say, Spain or France, it is possible for a foreign group to wholly own a company it sets up in Britain.

MEN AND MATTERS

Firework row smoulders on

"A quid for the guy" was the *unexpected demand of an* 8-year-old who hailed me yesterday. The 9,900 per cent increase on the traditional sum struck me as particularly ambitious in view of his "guy": this owed little to the finer points of taxidermy.

Any sneaking admiration one might have for such enterprise is sternly criticised by the National Campaign for Firework Reform. "We do not approve of teaching children to beg," they say, adding that children should not be encouraged to talk to strangers.

Such strictures apart, the *NCFR tells me that this year* it is sending out some "pretty frightening" posters showing the injuries fireworks have done to children. Last year one child was killed, according to Regina Dollar, the first head of *NCFR, and the government* figures show that 733 were seriously injured. This figure excludes those treated by GPs. On the positive side, the 1977 totals were no less than 60 per cent below those in 1969.

That was the year the NCFR was formed, and it has since had some minor successes though it argues that govern*ment reforms in 1976 did not* go nearly far enough. "It is not worth sacrificing children merely for tradition's sake," says *Mrs. Dollar.* She complains that each year the media only say "Come back later!" when she tries to rouse their concern.

She and her successor, Noel Tobin, are now gathering ammunition for the ritual television confrontations with the Firework Makers' Guild. The NCFR would like a complete ban on retail sales, as exists in various European countries and parts of the U.S. But the Guild says blandly that such demands were first made over 200 years ago and had been dropped because people started trying to make fireworks at home: they often set their houses alight.

Adopting a generous tone the Guild tells *me that its adversaries have done well in stress*ing fireworks must be handled properly. But otherwise it thinks the NCFR "very negative." The NCFR, for its part, argues it has not yet been negative enough.

Flying doctors

With *abominable* snowmen reputedly inhabiting the peaks and evil-intentioned deities adorning the temples, Nepal is not just a cosy mountain kingdom for its more superstitious inhabitants. Now they are facing what could be a new source of legend—a hovercraft which can speed along over the rocks and rapids of some of the *rivers* in that *Himalayan* fastness.

The hovercraft is due to be transported out to Kathmandu next month and is part of a project to improve the country's medical services: it will replace yaks *as a means of transporting* the sick to hospital. The project is led by the RAF and the hovercraft has been designed by Timothy Longley. He works for the Missionary Aviation Fellowship, a suitable organisation to have the doctors if not walking, at least flying on the water.

Low spirits

Norway's troubles are not coming singly these days. On top of a wage freeze and a frosty budget, Norwegians are now faced with enforced abstinence from all alcoholic drinks except *beer, their least favoured tipple.*

A strike by production workers in the State wine and spirit monopoly halted supplies throughout the country over a month ago. Sales personnel stayed on for a while, but there *seemed little point. As one* salesgirl remarked: "All you could do was shake your head and look sympathetic." Most staff have since been spared even this modest activity: the shelves are now totally bare.

Doctors at *Oslo's emergency* medical centre have been busy dealing with an inundation of alcoholics suffering from withdrawal symptoms and a public relations man showing the Press round a plastics factory last *week had shamefacedly to ask* journalists to bring their own refreshments.

*The State monopoly also con*trols industrial alcohol, and output is threatened at plants making a wide range of products, from hair spray to compasses, although a light-bulb manufacturer discovered that meths could be substituted in the production process and sent out employees to buy all available supplies.

Norwegians are pinning their hopes on the fact that the State arbitrator Konrad Knutsen has called a fresh meeting between the two sides this week. Only one thing is worrying the drinkers—Knutsen is a temperance *man.*

Canterbury tale

The law of distress excludes certain kinds of property from the attentions of creditors — among them deer and rabbits, and, more strangely, loose money; also any axe which the *debtor may be wielding at the* time of the bailiffs' visit.

But Canterbury city council, facing rent arrears approaching £30,000, has lighted on the fact that television does not figure in the ancient catalogue of life's necessities. Confident that intensive exposure to silence or the radio must force anyone into early submission, Canterbury *plans to start confiscating tele*visions.

"I bet most of these people *have colour sets,*" says the council's leader Arthur Porter. "We should send in the bailiffs to take them away."

It is an argument calculated to bring out the Tory in everyone except the National Tele*vision Rental Association.*

"Blighters" comments the NTRA's director Colin Dunlop. Since a large proportion of the miscreants' televisions are rented, it is not hard to understand his position.

He tells me he has managed to squash similar schemes in other parts of the country. "We send councils a judgment of a county court in 1968 which came down in our favour," says Dunlop. "Invariably they send a courteous *reply saying 'we quite under*stand and we won't do it'" His secret weapon is the obscure Law of Distress Amendment Act 1908.

Gentleman mugger

An old-world mugger who held up a man in Cleveland at sword-point last week also tailored his demands to the prices of a *gentler age: he wanted 50 cents.* When it turned out that the victim only had 30 cents, the mugger-cavalier, in a rage, punctured the man's car tyres. He was arrested soon afterwards. Cleveland police said it was *not hard to pick him out* from more conventional brigands.

Singularly right

Amid the heap of political *flotsam I brought back from the* Conservatives' conference at Brighton is a leaflet published by the Monday Club called Repairing Education. Policy Paper No. 3. It is a timely document, I find, arguing, inter alia: "Standards of literacy and numeracy among 10-year-olds is a national disgrace."

Observer

FINANCIAL TIMES SURVEY

Tuesday October 17 1978

EUROPEAN MOTOR INDUSTRY

The first ever Motor Show at the National Exhibition Centre in Birmingham which opens on Friday comes at the end of a year in which the European motor industry has seen momentous changes and at a speed which has surprised almost everyone.

A year of momentous change

THE LAST 12 months have witnessed momentous changes in the European motor industry. During this period, various moves towards further rationalisation have been set in train, while Renault has launched a new move into the U.S. market, and the links between the industry and Government have *been underlined by the projected deal between Volvo and Norway.* The pace of change has unquestionably switched into a higher gear much more quickly than most people in the industry expected.

The most dramatic development has probably been the $430m PSA Peugeot-Citroen bid for Chrysler's European interests. This has caught the headlines because its effect will be to create a larger car group than any other in Europe with a productive capacity of about *2.2m vehicles. But at the same* time it underlines Chrysler's retreat from international markets, and opens up new U.S. opportunities for the French group because of the possibilities of using Chrysler's distribution network for its own products. It will also put PSA into the top flight of world companies in terms of car output, ranking number three after General Motors and Ford.

In addition to this bid, the other most significant developments in the past year have *been:*

1. The outline agreement between Volvo and the Norwegian Government under which the Norwegian public (underwritten by the Government) will inject about £90m into the Swedish company in return for 40 per cent of the equity. This scheme, which *still has to be approved by the* Norwegians, also provides for the development of component manufacturing in Norway related to a new "light car," and for Volvo to be given drilling rights for Norway's North Sea oil fields.

This outline agreement was preceded by negotiations on a merger between Volvo and Saab to create a single, large, Swedish motor group. Although these have broken down, many analysts believe that the two companies will eventually come together, whether or not the Norwegian deal is finalised.

2. Renault's agreement with American Motors in the U.S. This deal will give the State-owned French company both access to AM's distribution network, and facilities to make its R18 model in America. This means that it will be able to insulate itself in future more easily against swings in the dollar, one of the major problems faced by direct importers, while solving the problem of establishing a dealer network which is the major difficulty facing an importer in such a big country. Renault is also negotiating with Mack, the American truck manufacturer, for similar distribution rights in the commercial vehicle field.

3. Volkswagen's opening of its new U.S. plant in Pennsylvania. Like the Renault deal, VW's decision to go ahead with U.S. manufacturing has been influenced by its *need* to avoid currency losses. The German company has been hit very hard in this area in recent years as the Deutschemark has appreciated at the expense of other currencies. At the same time, production costs in Germany have been moving up so rapidly that it has *now* become cheaper to make the vehicles in America itself. Unlike Renault, VW *already had an extensive* distribution network in the U.S., and these moves have been designed to protect this.

4. Negotiations to put SEAT on a new footing in Spain. These talks, which could well end in Fiat taking over complete control of SEAT in Spain, a company in which it already has a 33 per cent stake, follow SEAT's rapid sales decline in the last two years. This has been caused partly by the arrival of Ford and the launch of the Fiesta in Spain, and *partly by the expansion of the* country's Renault and Citroen subsidiary plants. The Spanish Government has a large stake in SEAT, along with several private banks, and one possibility is that the company will eventually be nationalised. But Fiat, which has provided the Spanish company with its basic *designs and engineering* in the past, may want to bring it directly under its own control, particularly since it gives the Italian company a stake in Europe's most rapidly expanding market.

CAR PRODUCTION IN EUROPE 1977

	Passenger cars
PSA PEUGEOT CITROEN	
Peugeot (France)	676,109
Citroën (France)	667,280
Total	1,343,389
CHRYSLER	
Chrysler (France)	476,565
Chrysler (UK)	169,492
Chrysler (Spain)	96,435
Total	742,492
TOGETHER:	2,085,881
VOLKSWAGEN	
VW (W. Germany)	1,208,867
Audi NSU (West Germany)	317,928
Total	1,526,795
RENAULT	
Renault (France)	1,259,038
Fasa Renault (Spain)	224,358
Total	1,483,396
Fiat (Italy)	1,200,707
GENERAL MOTORS	
Opel (W. Germany)	922,304
Vauxhall (UK)	93,237
Total	1,015,541
FORD	
Ford (UK)	406,633
Ford (W. Germany)	542,750
Ford (Belgium)	305,589
Ford (Spain)	213,268
Total	1,468,240
British Leyland (UK)	651,069
Daimler Benz (W. Germany)	409,090
Seat (Spain)	346,535
BMW (W. Germany)	284,771
VOLVO	
Volvo (Sweden)	171,800
Volvo Car BV (Netherlands)	54,000
Total	225,800
Alfa Romeo (Italy)	201,118
Saab Scania (Sweden)	76,498

Source: Economist Intelligence Unit.

5. Two deals involving commercial vehicle interests are also expected to make a considerable impact on the car manufacturing sector.

The first is the agreement between Fiat and Peugeot under which they become equal partners in an Italian State-aided scheme to build a new light van plant in south Italy. This will produce a vehicle more related in size to cars than commercial vehicles, and it seems that it will be marketed by Fiat's car network rather than its IVECO commercial vehicle subsidiary; similarly, Peugeot says that this vehicle will not be integrated into the commercial vehicle network it will inherit from Chrysler.

This move sees the French and Italian companies trying to *consolidate and expand their* position in the important light van sector which is coming under increasing attack throughout Europe from Japanese imports.

The other commercial vehicle deal is between Volkswagen and MAN in West Germany, and provides for the joint development and manufacturing of a vehicle to fit between VW's LT van (its equivalent of the Transit) and the smallest MAN trucks of about 14 tons. Moves are afoot *to establish a joint European* distribution company for this vehicle. Clearly, this development will help consolidate motor manufacturing interests in Germany—VW was weak in commercial vehicles, and MAN was an isolated large truck manufacturer — while strengthening their distribution networks. The significance for *the car industry in general* is that the deal will eventually give Volkswagen the range of vehicle interests, from the smallest car to the heaviest lorry, which most manufacturers now seem to be seeking.

At the same time, European producers are running into capacity and productivity problems because the growing maturity of the market is leading to a reduced rate of expansion of sales. This is making it less easy for individual companies to reduce *costs by adding new capacity.* In the 1960s, registrations were growing so rapidly—at about 8 per cent a year—that productivity gains could be accomplished by expanding capacity and introducing more automation as it increased. Demand was also strong enough to shelter the weaker, less viable production units, with the result that Europe entered the 1970s with a highly fragmented industry.

This era is now over. Forecasts suggest a growth rate of between 2 and 3 per cent in future. The raw demand of the 1950s and 1960s has been satisfied, except, perhaps, in Spain, and much of the future expansion will come from more marginal areas, such as the demand for second cars. In addition, Europe has sufficient capacity already to serve its needs, and may have to plan for the *disappearance* of some overseas markets of the past—Volkswagen's decision to produce cars in the U.S., for example, means ultimately *200,000 units fewer being made* at Wolfsburg in Germany.

This year's figures, following the expansion in most parts of the Continent as markets *recovered from the oil crisis,* in 1976-77, illustrates the point about stagnating sales. Registrations are steady in Germany and France, down in Italy and up in *the UK, with the result that the* total European market will be about the same in total this year as last at almost 10m units.

Predictions for next year *point to a similar pattern, with* sales probably rising in France and Italy, but almost certainly down in West Germany and the UK.

On the production side, no European country is currently expanding quickly. Output will probably come out for the year at about the 11.2m units achieved last year, and forecasts for next year do not envisage much growth.

The big question now facing the European car industry is how much further the pressures of a more constricted market and rising development costs will push the process of rationalisation. Most analysts believe that the scope for root and branch amalgamations, of the kind which took place in the U.S., will be limited by national political ambitions. One of the most significant elements of the *Peugeot takeover of Chrysler* Europe, for example, is that, although it contains an international element because of the interests in the UK and Spain, it re-established a strong, indigenously-owned, French industry. The VW-MAN deal shows a similar vertical structure developing in Germany, and Fiat's progress in the last ten years has done the same thing in Italy.

At the same time, political pressures in Europe seem to be pushing in the same direction. *The Italian Government* is supporting Alfa Romeo and giving big grants to Fiat to develop in southern Italy; the French Government financed Renault and sweetened the path for Peugeot's takeover of Citroen; the Scandinavians seem to be coming together to inject Norwegian oil money into Volvo; and the UK Government is *supporting* both BL and Chrysler UK.

Since it is difficult to foresee these national political interests in the industry being abandoned in the near future, it is unlikely that the European industry will slim down to the four or five companies which many economists think desirable. In addition, the presence of the big *U.S. multinationals in the shape* of General Motors and Ford—if no longer Chrysler—complicates matters further. Counting these companies, Europe has *some 12 significant car-produc*ing businesses—or 15 if PSA Peugeot-Citroen is split into its three constituent groups (Peugeot, Citroen and Chrysler Europe), and Fiat and SEAT are counted separately.

The alternative to complete mergers will involve the word which is on everyone's lips at the moment—co-operation. Companies in Europe will have to *get together to pool investments* and resources. This is the only way in which they will be able to accommodate the enormous bills for developing new ranges of cars, and to face up to the U.S. challenge which already involves co-operative design ventures between their European and American subsidiaries. There is no shortage of companies *in Western Europe* espousing this cause of co-operative development. Sig. Giovanni Agnelli, the boss of Fiat talks about it continuously, and Mr. Michael Edwardes, the BL chairman, stresses that the UK company's only way forward is through similar developments. During the last year the industry has begun to see some of these statements put into effect, and it does not look as though the pace of change is going to slow down at all for some time to come.

Terry Dodsworth

CAR PRODUCTION AND REGISTRATIONS—MAJOR MARKETS 1976-AUG. 1977
(in .000s)

	Production Cars	New registrations Cars		Production Cars	New registrations Cars
U.S.			**ITALY**		
Year 1976	8,497.9	8,261.8	Year 1976	1,471.3	1,187.6
Year 1977	9,213.6	10,751.9	Year 1977	1,440.5	1,228.2
% increase	+9.4%	+30.1%	% change	−2.1%	+3.4%
	7 mths. July	6 mths. June	**Half-year to June**		
1977	5,636.9	5,235.0	1977	776.5	649.9
1978	5,585.1	5,251.4	1978	805.9	579.4
% change	−0.9%	+0.3%	% change	+3.8%	−10.8%
FRANCE			**JAPAN**		
Year 1976	2,979.6	1,858.2	Year 1976	5,027.8	2,449.4
Year 1977	3,092.4	1,907.0	Year 1977	5,431.0	2,500.1
% change	+3.8%	+2.6%	% change	+8.0%	+2.1%
Half-year to June			**Half-year to June**		
1977	1,698.5	1,039.6	1977	2,618.2	1,195.5
1978	1,659.4	1,039.2	1978	2,961.5	1,336.0
% change	−2.3%	—	% change	+13.1%	+11.8%
WEST GERMANY			**UK**		
Year 1976	3,546.9	2,312.1	Year 1976	1,333.0	1,285.6
Year 1977	3,790.5	2,561.3	Year 1977	1,316.0	1,323.5
% change	+6.9%	+10.8%	% change	−1.3%	+3.0%
Half-year to June			**8 mths. to August**		
1977	2,019.4	1,451.2	1977	855,687	960.9
1978	2,063.6	1,502.9	1978	875,104	1,181.6
% change	+2.2%	+3.6%	% change	+2.3%	+23.0%

The overall picture for the British motor industry is not very encouraging. There has been a big rise in imported cars and UK producers have failed in their attempts to improve productivity.

Many problems in U.K.

UK CAR SALES have surprised everyone this year, not least the forecasters. Although in the past the British companies' market research departments have gained a reputation for accuracy, this year they have consistenly underestimated the strength of demand. At the beginning of the year they were suggesting a modest rise on last year's sales of 1.3m units to about 1.4m; but registrations now see to be heading for 1.6m cars this year, and could well top the record 1.66m achieved in 1963.

All that has happened, in effect, is that Britain has lifted into the upswing of the normal sales cycle a year earlier than most companies expected it to. Other countries in Europe, notably France and Germany, saw a similar expansion in 1976 and 1977, as replacement demand fed through for cars which were not changed during the gloomy period which followed the oil crisis. Britain, like these countries, may enter into a flat period next year unless there is some unexpected stimulation to sales.

In the meantime, the UK has become an attractive market to exporters looking for growth opportunities, and the continental manufacturers, in particular, have not been slow to exploit it. *In the pattern now familiar to* the UK motor manufacturers, rising demand has provoked a big rise in imports, which have captured much more of the *growth than the domestic manu*facturers. Thus by the end of August, imports had risen from 427,600 units and a market share of 44.5 per cent in 1977 to 571,600 and a market share of 48.4 per cent this year.

In sheer numbers, Continental producers have made the most impressive gains so far this year. Their sales rose during the first eight months by about 90 units from 293,000 cars to 351,000. This group was followed by the Japanese, with an increase of about 32,000 sales *from 100,000* units to 132,000. The EFTA countries and Comecon have scored fairly evenly, with increases of between 5,000 and 6,000 units to about 21,500 each.

The distribution of these changes in imports has been affected by two main factors: the development of the multinational companies' policy of supplying many of their cars from their associate factories in other parts of Europe; and the new agreement with the Japanese on shipment limitations.

The changes in multinational policy have come quite suddenly and have made a profound impact on the industry: by the end of this year it is possible that about 10 per cent of total sales will be accounted for by foreign cars sold in this way. The key date in the development of this tendency in Britain was the *rescue agreement* signed between the British Government and Chrysler in early 1976. This laid it down as a matter of policy that Chrysler was to integrate its UK facilities more closely into its European network, thus opening the door to a free flow of Chrysler's French and Spanish products into the UK. Ford and *Vauxhall, both of* whom had been moving towards more European integration in the first place took this as the cue to develop their own sourcing from overseas. Ford, for example, now supplies Britain with built-up cars from four countries overseas — Germany, Belgium, Eire, and Spain.

On the Japanese side, sales have continued to rise this year despite the pledge to limit car shipments from Japan to the same level as last year. But it could be argued that they would have gone up still more had there been no agreement. What has happened is that the Japan*ese car importers have been* able to draw on considerable stocks in the UK to keep sales moving ahead; they have also, so far, shipped out more cars than last year to replenish the supply lines. But these exports from Japan are now beginning to fall, and will be required to drop even more if they are to conform to the shipments deal. *So in the last few months of* the year, the Japanese importers will come under pressure to reduce their registrations, particularly if a further agreement is drawn up to limit shipments next year as well.

Among the Comecon and EFTA importers, the most notable increases have been made by Lada, the Russian manufac*turer which sells its vehicles* mainly on price, and Volvo, the Swedish producer which has managed to recover very effectively from its slump last year with sales up by about 5,000 units to ,400.

Among the smaller EEC producers, also, considerable advances have been made: sales are up significantly at Alfa Romeo, BMW, Citroen, Peugeot, Opel and Lancia. Indeed, only Mercedes among this group has suffered a decline, and this is mainly because of supply shortages.

Given these across-the-board increases, it is no surprise that *the British position* has not fared particularly well. It is difficult, however, to untangle the main cause of this. Part of the reason is the clear decision of the multinationals to supply more of their UK needs from overseas, rather than their domestic facilities. But in the case of BL Cars, the main source of UK-manufactured vehicles, analysts disagree as to whether its poor showing this year is due to low production or rapidly declining public interest in its ageing range of vehicles.

UK CAR REGISTRATIONS — 8 MONTHS TO AUGUST

	1978	%	1977	%
Alfa Romeo	8,651	0.73	5,887	0.61
BL	268,369	22.71	241,370	25.12
BMW	7,643	0.65	6,304	0.66
Chrysler	78,140	6.61	57,488	5.98
Citroen	22,736	1.92	16,874	1.76
Colt	8,027	0.68	5,017	0.52
Datsun	76,624	6.48	59,764	6.22
Fiat	51,269	4.34	46,403	4.83
Ford	318,056	2692	241,571	25.14
GM Opel	15,237	1.29	12,279	1.28
GM Vauxhall	96,589	8.17	90,216	9.39
Honda	14,538	1.23	10,263	1.07
Jeep	224	0.02	—	0.00
Lada	12,244	1.04	8,612	0.90
Lancia	8,545	0.72	6,123	0.64
Lotus	414	0.04	327	0.03
Mazda	9,816	0.83	8,726	0.91
Mercedes-Benz	4,877	0.41	5,057	0.53
Panther	156	0.01	—	0.00
Peugeot	*21,942*	1.86	*16,512*	1.72
Polski-Fiat	2,119	0.18	974	0.10
Reliant	1,135	0.10	1,756	0.18
Renault	50,552	4.28	41,808	4.35
Rolls-Royce	960	0.08	876	0.09
Saab	4,365	0.37	3,531	0.37
Skoda	6,889	0.58	7,029	0.73
Subaru	1,029	0.09	—	0.00
Toyota	21,753	1.84	16,250	1.69
VW/Audi	45,090	3.82	32,591	3.39
Volvo	21,397	1.81	15,616	1.63
Wartburg	2	0.00	6	0.00
Others	1,599	0.14	1,453	0.15
Grand total	1,181,623	100.00	960,915	100.00
UK penetration by source				
British	609,978	51.62	533,327	55.50
Comecon	21,255	1.80	16,624	1.73
EEC (excluding British)	381,389	32.28	293,240	30.52
EFTA	21,762	1.84	15,299	1.59
Japan	131,793	11.15	100,022	10.41
Others	15,446	1.31	2,403	0.25
Total imported	571,645	48.38	427,588	44.50

UK CAR PRODUCTION—WEEKLY AVERAGE

	1978 Jan.-July (30 wks)	1977 Jan.-July (30 wks)
BL Cars	12,544	12,528
Chrysler UK	3,424	3,242
Ford	8,237	7,817
Vauxhall	1,884	2,151
Lotus	24	20
Reliant	13	51
TVR	6	7
Others	76	68
Wkly. avge total	26,208	25,884
Total of recorded productn.	786,230	776,517

The answer probably lies somewhere between the two. Certainly BL's production has suffered plenty of reverses this year (in the first six months *the group made a weekly* average of 12,544 cars against 12,528 in the same period last year); and equally clearly it has had some trouble in selling the Marina this year, since the car has been offered at considable discounts in a novel "run-out" campaign preparatory to the introduction of a new model.

Compared with BL, Ford UK is currently riding on the crest of a wave. It now has a model range in which no car is older than three-and-a-half-years. It *is also making record profits,* is in the process of large scale new investments in the UK, and has a waiting list for its vehicles which easily outstrips demand. The Cortina and the Escort are consistently the country's best-selling cars, while the Granada and Fiesta are also in the top ten.

Some executives in the industry believe that Ford could easily raise its market share now if it wanted to. But the company's strategy appears to be one of only limited expansion. It has done little in the UK to raise car assembly output in recent years, apparently because it remains sceptical about the discipline of its British workforce, and has concentrated instead on the development of its British component manufacturing facilities.

This policy does not appear to have been changed by the recently-announced decision to invest £1bn in the UK over the next four years. A good proportion of this—probably about half — is going into the Erika project to build a new car to replace the Escort. About £180m will go into the engine for this vehicle, and the rest into development, new assembly facilities and related projects. Most of the rest of the expenditure will go into modernisation projects.

Like Ford, Vauxhall has reaped the benefit in the last two years of having a number of new cars to offer the public. The company is not doing so well as expected this year—its sales are only up from 90,000 to 97,000 as production has been virtually static—but it is expecting a boost later in the year from the introduction of two more up-market models. These cars, like its new Chevette and Cavalier vehicles, are just more evidence of its increasing integration with GM's Opel plants in Germany. They have been derived from the Senator and Monza range, which have already been launched on the Continent, and indicate the way in which GM has also edged away towards investment in Germany and on the Continent rather than the UK car assembly industries.

Compared with last year, Chrysler has also made a considerable recovery this year. But its sales are still quite limited —at 78,000 so far they are only about 2,000 ahead of the leading importer's, Datsun's — and its future is now back in the melting pot following the bid from Peugeot-Citroen. Thus it remains an open question whether it will go through with the plan to introduce another new car next year as laid out in its 1976 agreement with the British Government.

The overall picture which has emerged of the British industry this year, therefore, is not very encouraging. BL is continuing to invest quite heavily, but only by dint of drawing on Government funds, and Ford is not adding to assembly capacity. All three of the multinationals are now keeping alive many of their ambitions in the UK by importing cars, and other importers are strengthening their networks in the UK. Meanwhile none of the UK producers seems able to raise production or productivity and, with the break-out of the recent Ford strike, industrial relations problems have again come into the forefront. This is the kind *of situation which a growth* market probably exacerbates rather than helps.

Terry Dodsworth

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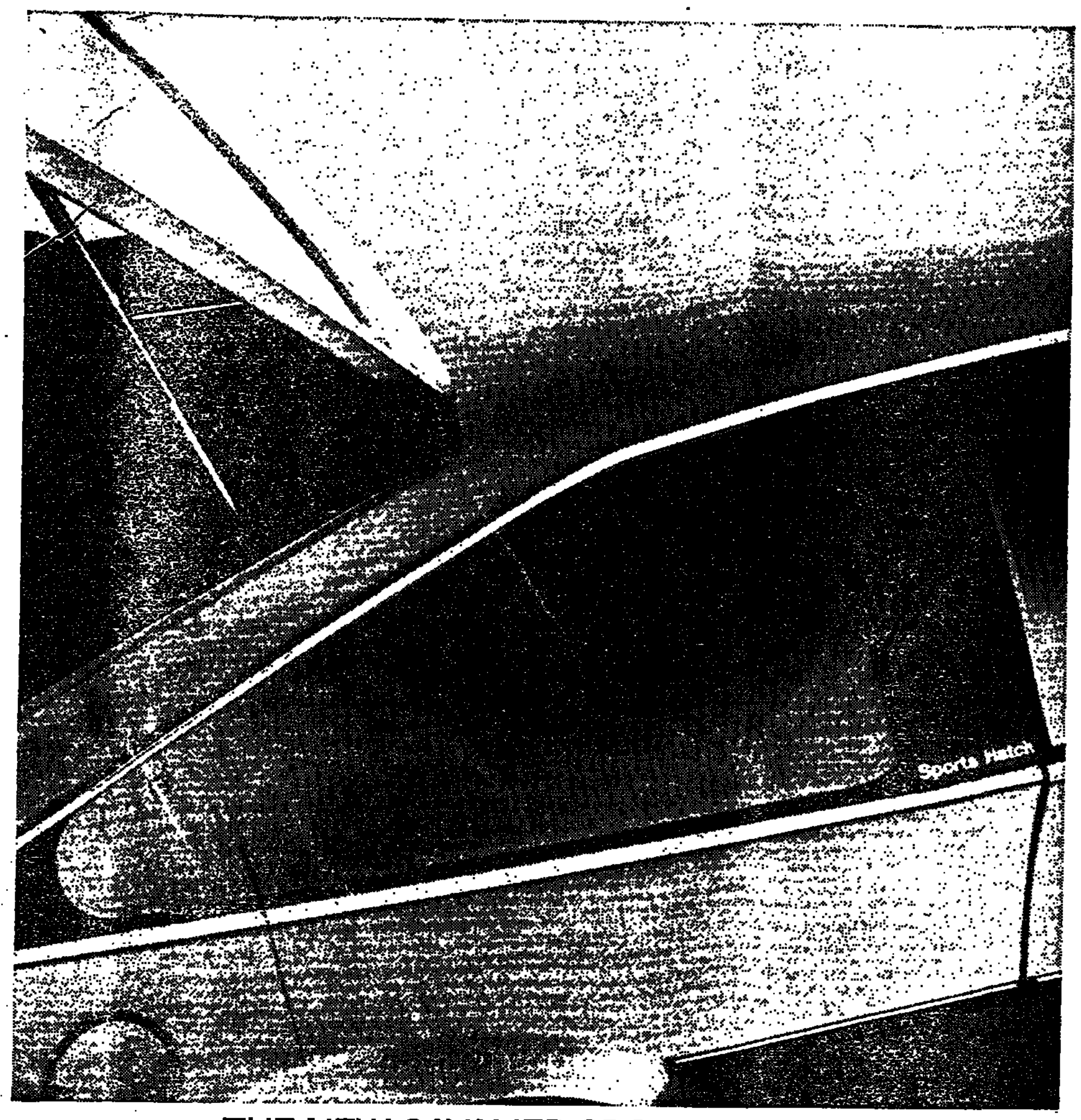
The Chevette and Cavalier, highly acclaimed by leading motoring journalists, saw the start of a new era for Vauxhall.

The extraordinary success of these cars can best be illustrated by the sheer number seen on our roads today. Building on this success, we enter a new phase with the introduction of six new cars.

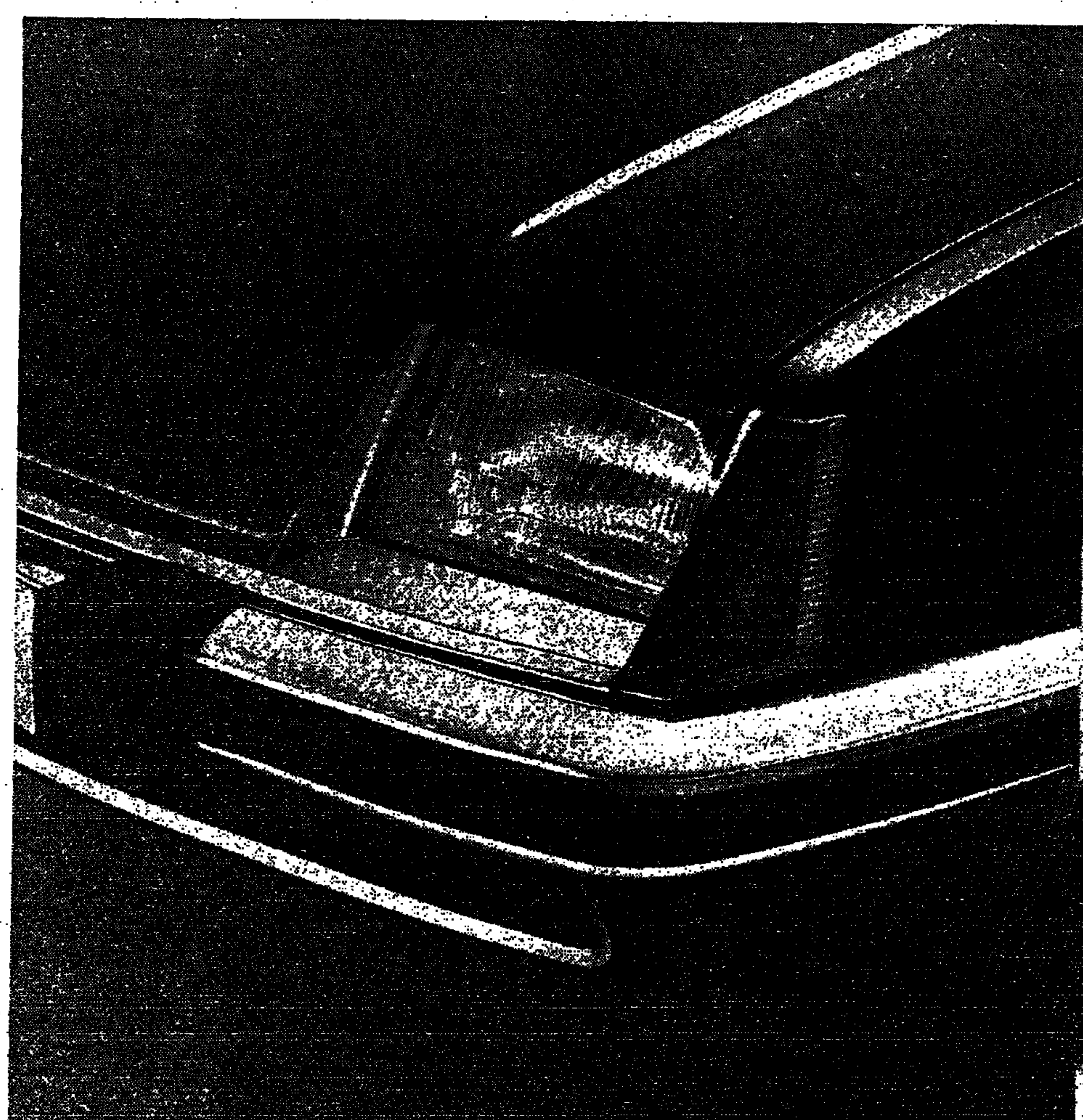
The Sports Hatch, now available as a 1600 or 2000, joins the elite ranks of the Cavaliers whilst the new Carlton 2-litre Saloon and Estate, and the luxury 2.8 Royale Saloon and Coupé complete a truly comprehensive range of quality cars.

You can see where our future lies on Stand 484, Hall 5, at the Motor Show or at your local Vauxhall dealer. We think you'll agree it's looking rosy.

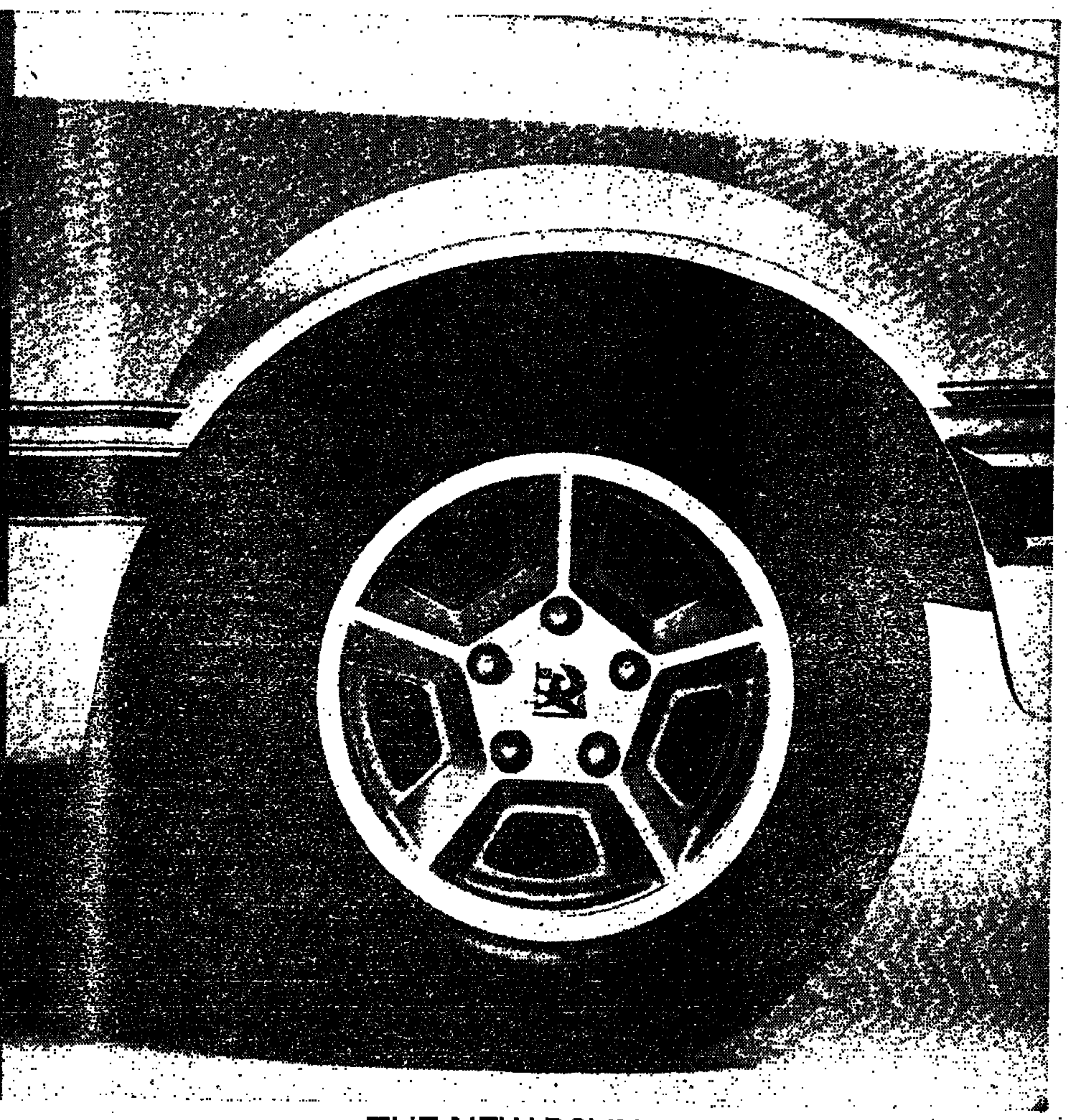
VAUXHALL GM



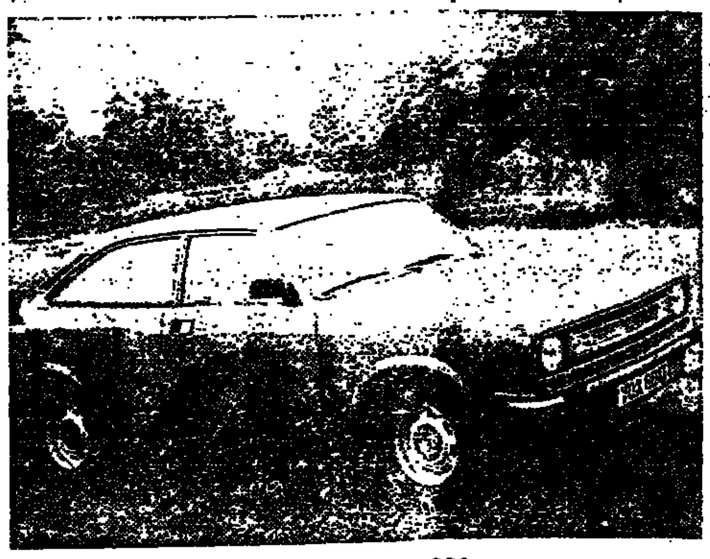
THE NEW CAVALIER SPORTS HATCH



THE NEW CARLTON



THE NEW ROYALE



The Morris Marina 1300 coupe

The Triumph Dolomite 1500 HL

On the next three pages our correspondents discuss the performance of the industry in the major European centres in the light of the major moves towards rationalisation which have taken place over the last year.

West German performance

THE WEST German motor industry's output of car and estate vehicles increased by 4 per cent in the first eight months of this year. The figure is rather more impressive than it at first appears for the motor manufacturers last year were working flat out at full capacity.

Car makers here have been enjoying a boom in the domestic market that has swept sales and profits up to record levels. Production capacity has failed to keep pace with demand and delivery periods have been lengthening considerably even in the popular car market.

Last year the country's car makers turned out some 3.55m units—7 per cent up on the previous year's figures. At the same time exports, despite the strength of the deutsche mark, went up by 11.4 per cent to 1.94m units. While car sales are still well below 1973's pre-oil crisis record of 2.17m units, the car manufacturers have little to complain about.

This year domestic car registrations increased by only 3.6 per cent during the first half year, compared with a growth of 9.9 per cent during the same period of 1977. Exports also went up rather slower than expected, rising by 4 per cent in the first eight months to 1.23m units.

However, although it appears that the industry's analysts are correct in that the boom has reached its peak, there are no signs that production will fall back heavily. The German public's love affair with the motor car is expected to continue. The industry's most impressive performance this year was at Volkswagen which has now more than regained its reputation which was tarnished by accumulated losses of DM1bn in 1974 and 1975. Its powerful recovery with net profits of DM1bn in 1976—when it had the benefit of large tax write-offs—was followed up with after tax earnings of DM483m in 1977. A couple of months ago, however, the concern, which is the Federal Republic's largest motor manufacturer, jubilantly announced that this year's first half results were even better than ever. They had risen by a third on the performance of the first six months of 1977 to DM 265m.

The group has so much cash in hand—the liquidity of the parent concern alone was DM3.5bn at the half-year mark—that the management is planning to make a major acquisition in the near future to give VW "a second leg" to offset the cyclical fluctuations in the car market. Although plans are still in the study phase, there is some urgency to the scheme as the balance sheet of the company is currently more reminiscent of a bank than an industrial company.

Perhaps even more impressive is the fact that VW has completely turned around its loss making subsidiaries in Brazil, Mexico and the U.S. Figures for the opening six months of 1978 show that Brazil's first half loss of DM 25m last year was turned into a DM 40m profit. In Mexico a DM 33m loss this year became a first half DM 33m profit, while in the U.S. where the group has started production of its American version of the "Golf," 1977's first half loss of DM21m was turned into a modest net profit of DM11m.

Strength

But if Volkswagen symbolises the resilience and strength of the industry, its history also provides a graphic illustration of the dangers that it faces. VW lost the U.S. market more as a result of the effect of the appreciating value of the Deutsche Mark on dollar prices rather than the fact that its ageing "Beetle" model was losing popularity.

Its export performance remains relatively weak in comparision to its record in the 1960s and early 1970s. Now it appears that its domestic market is under assault from its foreign competitors. Domestic registrations of private cars show a substantial increase in imports. During the first half of the year the proportion of imported cars among the some 1.5m vehicles registered increased from 21.5 per cent in the first six months of 1977 to 24.1 per cent.

Until now the French have dominated the imports market, with the Renault marque heading the league. However, the Japanese are moving into Germany in a large way and their aggressive sales strategy appears to be bearing fruit.

Registrations of Japanese-made vehicles were up by 53.7 per cent during the first half of 1978 compared with the figures for the comparable period of last year. Admittedly their slice of the market is tiny—48,188 units in the opening six months—but there is a growing acceptance of Japanese design, quality and, above all, price among West German consumers.

While it will be the mass car producers who will feel the sharp breeze of Japanese competition, the upper end of the trade has also had a nasty shock. Detroit models are being introduced to the market end of the market which is dominated by Daimler-Benz and BMW.

General Motors, which owns Adam Opel, the Federal Republic's second largest car maker, has been testing the West German response to the latest American products. The U.S. challenger, furthermore, appears to be coming rather sooner than the German manufacturers expected it. Last year it forecast that Detroit models would not be seen in Europe until the mid-1980s.

GM has been offering two cars for sale—the Camaro sports car and the Malibu classic saloon—and sales have been very encouraging for the U.S. manufacturer. Both models are very European in concept and are fully equipped to meet West Germany's stringent registration regulations.

Although they are both very American in styling terms, the design requirement—forced on Detroit by the U.S. Government's new fuel consumption and emission regulations—for the first time brings American cars into the European league. The fact that they come with the standard American accessories' package is an added incentive for buyers who are used to paying extra for everything from a cigar lighter to electric windows.

The Americans' prices are more than competitive. A Camaro, for instance, sells for DM 17,700—the price one would expect to pay for a small, medium range BMW. Furthermore the decline of the dollar has enabled GM to drop its prices twice this year already, once by 3 per cent and then by 4.4 per cent.

The Germans' acceptance of the U.S. products has been more than encouraging. Projected sales for 1978 are 20,000 units—a figure that the marketing men intend to raise by 30 per cent to 26,000 units next year. It is understood that the entire year's deliveries have been sold out the moment they have arrived on the market.

Challenge

While General Motors is very coy about its plans, many of the industry's observers believe that its challenge to the up-market German producers is very serious. When one considers that customers are being asked to wait for up to four years for delivery of the lower end of Daimler-Benz's range, the opportunities for the U.S. manufactured quality cars seem very good.

This poses problems for the German quality car manufacturers. In order to remain competitive, they—like their counterparts at the popular end of the trade—have been investing heavily in rationalisation programmes, automating plant and eliminating bottlenecks in production. However, rapid expansion of production capacity is limited by their ability to maintain quality. All in all the outlook for Detroit is good.

Guy Hawtin

Swedish exports have improved

BOTH SWEDISH automobile manufacturers, Volvo and Saab-Scania, have been doing better in 1977 with export sales offsetting the slump on the domestic car market. The most exciting event of the year, however, has been the bold deal under which a holding company jointly owned by the Norwegian state and private investors is to take a 40 per cent stake in Volvo.

The export sales recovery linked with the devaluation of the krona has returned Volvo's car production to profit while it must be assumed that the profitability of Saab cars, which have been running at loss for years, has also improved. Nevertheless, these advances do not answer the questions about the long-term viability of two relatively small manufacturers from a high-cost country in a challenging world market.

The agreement negotiated by Mr. Pehr Gyllenhammar, Volvo's managing director, with the Norwegian Labour Government was a quick rebound after the breakdown last year of the merger talks between the two Swedish manufacturers. Volvo stands to get SKr 750m ($170m) in new share capital, a partner who will have strong capital resources and access to a potential new source of income from North Sea oil.

Mr. Gyllenhammar himself saw the agreement as marking a switch from the defensive posture Volvo had had to adopt during the previous couple of years, as rising Swedish costs and a contracting world car market, ate away at its profit margins. The Norwegian connection promises to supply at least part of the cash Volvo badly needs for product development.

Contract

The final contract is not yet safely in harbour. The agreement has aroused considerable criticism in Norway, mostly from industrialists and economists but also from opposition politicians. The Norwegian Federation of Industry has queried whether Volvo's promise to create between 3,000 and 5,000 new jobs in Norway can be fulfilled. At the same time, it points out, the agreement would commit Norway to share responsibility for maintaining "extensive industrial activity and some 44,000 jobs in Sweden."

The Norwegian Government also faces difficulties in disposing of that half of the shares in the new holding company which should go to private investors. In return for compliance with the Government's wage and price freeze the Norwegian trade unions obtained the postponement of the Finance Ministry's plans to ease stock market conditions. The Government has been trying to organise a group of banks and insurance companies to take up the Volvo shares.

The timetable for the agreement has slipped and been further delayed by the collapse of the Swedish Government. The final terms were not ready by October 15 as planned which means that ratification of the Parliament cannot take place until next year.

Yet these negative developments are counter-balanced by the strong political commitment to the Volvo deal within the Norwegian Labour Government. Prime Minister Odvar Nordli has made it a personal issue to steer the agreement through the Storting (Parliament) and for the moment the chances are that Mr. Gyllenhammar will succeed in bringing into Volvo a new capital-strong shareholder.

The prospects for completion of the Norwegian deal have certainly been enhanced by the turn-round in Volvo's performance during the first part of the year. At the half-way mark the company showed a 41 per cent increase in pre-tax earnings to

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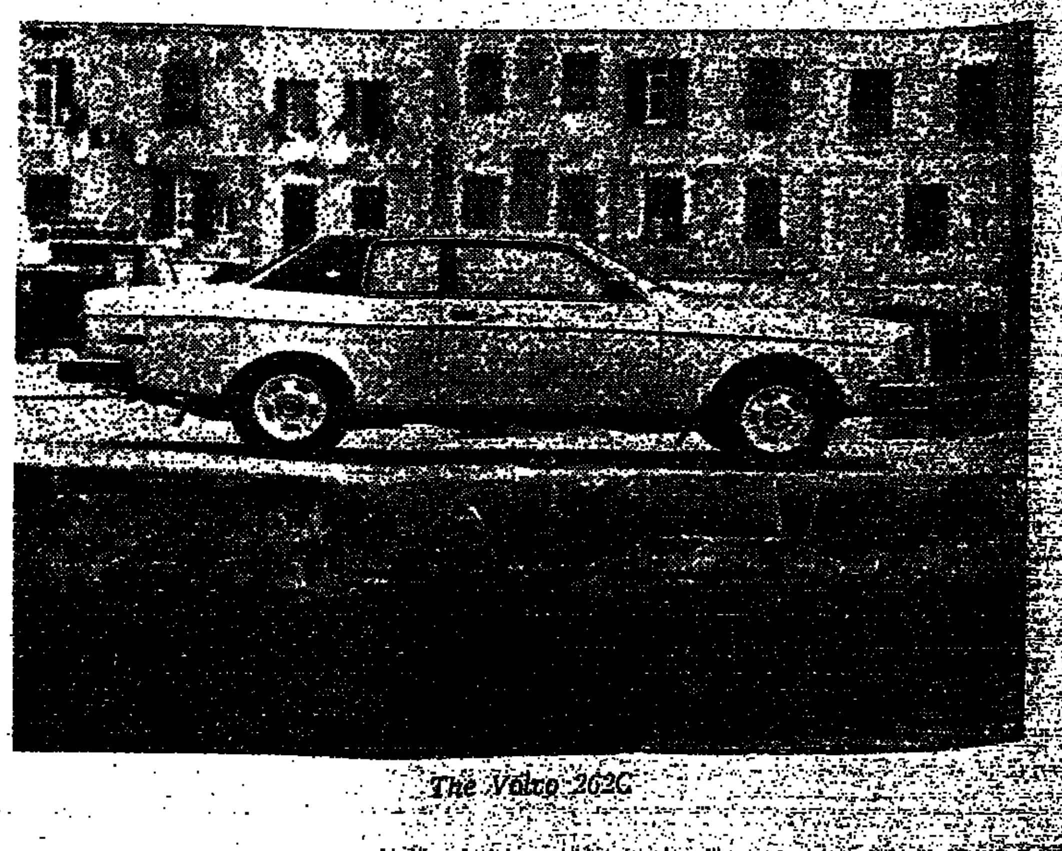


The Volvo 262C

French become a world force

THE FRENCH motor industry is going through one of the most important periods of structural change in its history. Peugeot-Citroen, the result of the 1975 merger of two medium-sized manufacturers, has catapaulted itself (and the image of French technology) into the world rankings with its purchase of the European operations of Chrysler.

The State-owned motor company, Renault, for so long used to being the country's No. 1, is negotiating for the distribution and eventual manufacture of its vehicles, particularly the new 18, by American Motors Corporation, reflecting ironically on the fact that more than two years ago it was refused permission by the French Government to discuss the acquisition of certain Chrysler assets because it would open up too great a gap between the public and privately-owned French motor sector.

On the components front, the disputed acquisition by the Ferodo group of the Ducellier electrical components company in the face of the bitter struggle by Lucas to apply what it though was a water-tight agreement giving it first refusal of the 51 per cent it did not already own in the company has created for the first time a European scale French-owned components group. Ferodo faces, however, a formidable task in welding a whole string of recent acquisitions — some of them in very wobbly financial condition — into an efficient group.

In the commercial vehicles sector, Peugeot-Citroen has made its entry into the heavier sector (all the French manufacturers produced light vans) via the Dodge activities which came with the Chrysler purchase. Renault, two-thirds of the way through the complete renewal of its range, is discussing an agreement with Mack whereby the U.S. manufacturer would make available medium diesel-powered trucks through its American sales network.

The contrast with a few years ago is remarkable. In 1973 Chrysler France accounted for about 15 per cent of output and

REGISTRATION OF CARS IN FRANCE BY MARQUE

(In percentage terms for the first six months of 1977)

Renault	33.5
Peugeot	18.0
Citroen	16.7
Chrysler France	11.2
Ford	4.7
Fiat	3.4
VW	2.7
G.M.	2.5
British Leyland	1.3
Alfa-Romeo	1.2
Japanese	1.2
Others	3.1

some 10 per cent of sales. Citroen, which in 1974 was to lose FFr 1bn, with a reputation for technological innovation and Peugeot, with its tradition of solid but relatively conventional engineering, each counted as medium-sized concerns with around 20 per cent of sales in the national market.

Renault, with the national "mission" as an exporter and *shop-window for the French* industrial progress — not to speak of its more uncomfortable role as something of a mirror of French social changes—was well ahead of the field with a third of annual registrations and some 40 per cent of production.

In 1975 came the upheaval of the rescue of the Citroen group, which comprised the car manufacturing activities of the Lyon-based Berliet commercial vehicle division. Peugeot, with a Government financial dowry, took the car interests, and Renault took Berliet to add to its own Saviem commercial vehicle interests covering collectively just short of a half of the national market.

Peugeot fare the better. The national market for cars has remained buoyant beyond the expectations of the oil crisis pessimists. Renault took over Berliet several years too late: it was just in time to walk into the worst recession in the commercial vehicle sector for decades—a recession which is still getting worse. Initially maintaining the separate organisations of the two subsidiaries, Renault has finally merged Berliet and Saviem into Renault Industrial Vehicles although the two marques remain in being, at least on the home market. When its new range of light vehicles comes out next year RIV will have remodelled the entire range, based on making Berliet and Saviem vehicles complementary within a unified range and emphasising the common use of components.

But with an investment programme in commercial vehicles of FFr 5bn (now stretched out over longer than the five years originally programmed) RIV is in the unfortunate position of a proud grandfather who has prepared a lavish christening party for his first grandson only to find that the guests have declined the invitation: the market for vehicles of more than 5 tonnes has fallen by a quarter over three years to take it back to the level of 10 years ago: prices are 15-20 per cent below their pre-crisis level and Renault has opted to lose market share slightly rather than persist in a price war. RIV lost FFr 250m last ear and is heading for much worse this.

If commercial vehicles are the bad news, private cars are undoubtedly giving recession-proof evidence of the place they hold in the Frenchman's affections. In the first eight months of this year only the scattered strikes at Renault before the summer holidays prevented output reaching 2m. In the first half of the year France exported 840,000 complete vehicles and a further 250,000 for overseas assembly. Imports were only 215,000 and the penetration of imported vehicles has declined recently to around 20 per cent.

Renault's world-wide production will rise to 7,850 vehicles a day this autumn, of which 6,400 will come out of factories in France. It has filled out its model range during the course of the year, adding the four versions of the Renault 18 which it looks to as its first really international car (it is earmarked for overseas production, including in the U.S.); completing its Renault 5 "mini" with an automatic version; expanding the 14 into a full range; topping up the expensive end of the range with the 30 TX; and adding a GTL version to that evergreen not far short of its 20th birthday, the Renault 4.

But in the sudden position of being the challenger instead of the market leader, where does the state-owned company go? According to M. Bernard Vernier-Palliez, its chairman, it relies on internal growth. Certainly, it is difficult to see a suitable candidate for a Renault merger or takeover. Conversations with British Leyland have more or less come to a halt since Mr. Michael Edwardes took over control of the company: M. Bernard Hanon, the head of Renault's car division, says that previous discussions had opened up the way wide-ranging co-operation, and he recently commented that he hoped that talks would resume as soon as Mr. Edwardes had established the main lines of BL development.

M. Vernier-Palliez describes Renault's strategy as being based on three principles: unity of marque and image; unity of the range; and unity of the commercial network. This strategy had already taken the company from a world-wide production of 565,000 in 1962 to 1.737m last year.

This year the company will invest some FFr 2.5bn to modernise existing factories, develop automation (particularly welding and painting robmots) and in the n — — robots) and in new plant. It is also extending its overseas facilities around certain "poles"; for example, an Iberian pole in Spain and Portugal which will eventually be closely associated with French operations.

Careful

But the star turn of the year is, of course, Peougeot-Citroen. One must be careful not to focus too strongly on the whizkiddery of the 41-year-old chairman of Peugeot-Citroen (despite the double-barrelled name, the parent company is Peugeot) Jean-Paul Parayre, who came into the group with Government blessing four years ago after a career galloping through the upper ranks of the civil service. Peugeot is still a traditional company, and M. Parayre has been tempted by the personality cult. A directorate of three takes the final decisions: a lot of the leg-work on the Chrysler take-over was done by his predecessor, M. François Gautier, while the Peugeot family, with 40 per cent of the capital, has by no means retired to live off the glory of its name.

The Chrysler takeover, for $230m cash and 15.5 per cent in PSA Peugeot-Citroen, would give the French group this year 44 per cent of the national and 18 per cent of the European market. The most desirable asset is undoubtedly the Simca French group, with half a million cars of output based on the more modest family car — the still popular 1100, the successful 1307/8, and the new Horizon. Simca's profits record is patchy.

The acquisition of the Spanish interests of Chrysler will reinforce the drive towards overseas manufacturing capacity: the new medium-range Peugeot 305 is destined to be the backbone of the overseas presence in the same way as the competing Renault 18 is the pivot of the state-owned company's efforts.

The big question-mark—discussed elsewhere in this survey — is over the British Chrysler activities.

The French company has promised that it will maintain the integrity and identity of the three component parts of its empire — Peugeot, Citroen and Chrysler, with separate dealer systems. This follows the pattern it established with Citroen. When Peugeot acquired Citroen only a very small team of Peugeot men under Mr. George Taylor went across to the new acquisition to turn it round, and a similar discretion is to be expected in its treatment of the Chrysler operations.

However, the three marques do now present something of a proliferation of models with a lot of overlap, and since the avowed purpose of the acquisition is to rank in size with the U.S. and Japanese industry and gain the consequent economies of size, a lot of effort is likely to go into achieving the maximum common use of components within a homogenous model range, allowing for flexibility in adapting production to the demands of the market.

The refusal of the French Government to sanction the increase in the Lucas stake in the electrical component company Ducellier from 49 per cent to full control despite the pre-emption agreement Lucas had negotiated with the seller, DBA (Bendix) illustrates another element in motor industry policy. Over the past few years a series of ailing component companies have been brought under the wing of the Ferodo group in an attempt to introduce a French name into the world market for components.

The complete acquisition by Lucas of Ducellier, according to the Government's thinking, threatened to render these efforts useless by establishing Lucas firmly as the competitor to Bosch of West Germany with a high-technology product range against which Ferodo could not compete. According to the Government scenario the ambitions for Ferodo (particularly in the field of electrical motor control equipment) would have been destroyed as Lucas and Bosch fought over the European market, leaving the French group a casualty of the inevitable price war.

The Renault 14TL

Hence, Ferodo has now acquired (at the latest count) the voting rights if not the capital of the former DBA stake in Ducellier and is confident enough of its position to announce its intention to raise new capital to complete the acquisition.

The French Government is understandably allergic to the belief among many foreigners (and promoted, incidentally, by much of France's overseas publicity) that it presides over a country noted for fashions, perfumes, good living and a certain bloodymindedness in foreign affairs. It would like to project France as a top-flight technological nation intent, as M. Giscard d'Estaing describes it, of being present at the "important rendez-vous of history." The motor industry, at any rate, is loyal to this ambition.

David Curry

EUROPEAN MOTOR INDUSTRY VI

Signs of recovery in Italy

THERE ARE signs emerging of a gradual recovery of the Italian motor industry. After four years of crisis conditions, the domestic market is expected to grow by an estimated 10 per cent this year with sales likely to total about 1.3m, but while this figure is a significant improvement over last year's total, it is still some 200,000 short of the record sales of 1.5m during the so-called "golden days" before the energy crisis.

The explanation of the much slower recovery of the Italian market compared to other European countries like France and West Germany, which turned out record production last year, is in large measure the result of the weakness of the Italian economy as such rather than the motor industry itself.

However, the Government is now attempting to introduce a long overdue recovery programme aimed, in part, at promoting a general increase in industrial output at the same time as containing the continuing increase in labour costs to enable industry to maintain export competitiveness.

The Government appears in recent weeks to have gained the broad support of the country's political and labour forces for its three-year (1979-81) programme. This has generated a degree of qualified optimism among industrialists, who nonetheless stress that the real test of the ability of the Government to enforce its programme has yet to come.

Indeed, this key test is likely to take place during the next few months when a series of major national labour contracts will be renewed involving a total of some 6m workers. Among these is the crucial Metalworkers and Engineering Union contract which has traditionally set the pattern of wages in Italy and directly involves the motor industry. And while union leaders have generally accepted the need to moderate wage claims and accept such issues as the principle of labour mobility, there are so far limited signs that the union rank and file shares such sentiments.

Negotiations

In this sense, the labour negotiations will be clearly decisive for Fiat, Italy's largest private enterprise. The Turin group is heavily dependent on the domestic market. Its sales currently account for as much as 56 per cent of Italian registrations and any repercussions on the Italian economy as a whole immediately work themselves down on the group's performance.

In much the same way, the attitude of the trade unions will be determining for Italy's other main motor manufacturer, the State-controlled Alfa Romeo car group. Alfa Romeo, and particularly its Alfa Sud plant near Naples, has been plagued by chronic labour difficulties which has provoked serious distortions on production levels.

Production at the Alfa Sud plant, representing an investment of some £400m, has been running at about a third of its capacity of some 250,000 cars a year. Over the past five years, Alfa Romeo has built up as a result of these production problems huge losses of more than L500bn.

Next month, the State holding Istituto Per La Ricostruwione Industriale (IRI) is scheduled to take a decision on whether to inject fresh capital into the troubled car group, and it is probable that IRI will have to call on the Government for urgent funds to keep the Alfa Sud plant open against all normal economic criteria. Already a top management reshuffle has taken place at Alfa Romeo, and despite optimism earlier this year—following a lengthy round of negotiations with the trade unions—that production could be raised, the future of Alfa Sud still looks uncertain.

Against this still uncertain situation in Italy, Fiat, for its part, has continued its broad policy of spreading its interests in other markets. While the company has been engaged in a series of deals with eastern European countries and developing world markets, Fiat has its eyes firmly set on the European community market. Its aim is to increase its present 5 per cent share of the EEC market to about six per cent to compensate the inevitable inroads of foreign manufacturers on the Italian market.

In recent months, Fiat has launched a major publicity campaign in the main community markets to promote its cars. This already appears to have paid some dividends. In Britain alone, the Turin group has seen its market share rise over the last eight months to 4.3 per cent with sales increasing by 10 per cent compared to the same period last year.

The group is also launching on the community market this month its new range of models, including the Fiat 'Ritmo' and the Supermirafiori 131 together with new diesel models. As a result of the introduction of the new A112 model, Fiat's Autobianchi sales in the first half of the year increased by 24.5 per cent, and the group is relying on its more prestigious Lancia range to build up its presence on the European market.

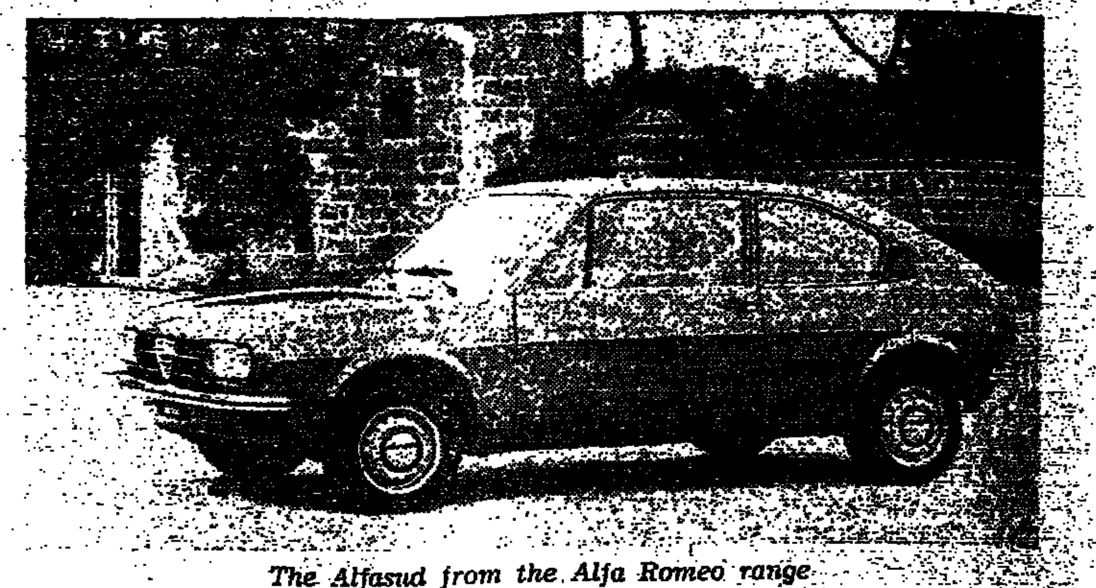
At the same time, Fiat is now on the verge of completing its reorganisation programme started in the early 1970s. This will transform the group into a series of operating companies under the control of a central holding company to give each individual sector greater autonomy and flexibility. At a shareholders meeting last month, Sig. Giovanni Agnelli, the Fiat chairman, announced the creation of an independent car subsidiary incorporating Lancia under the control of the Fiat parent company. The car subsidiary will be the last new operating company to be set up in the reorganisation plan, which has seen the creation of a series of other such companies for each individual industrial sector in which Fiat is involved.

In the longer term, Fiats strategy in the motor sector is committed to a broad European policy to rationalise the European car industry to enable it to compete with the big U.S. and Japanese car groups. Sig. Agnelli has said he favoured the merger between Peugeot Citroen of France and the UK Chrysler groups European activities, but such mergers are at the same time putting pressure on the Italian car industry, which has had to rely increasingly on exports. Indeed, Fiat has for long argued against Japanese imports to Europe and the setting up of a 10 per cent limit of the Japanese share of the EEC market.

In recent years, Fiat has concentrated its main efforts in its non-motor activities. This has led, for instance, to the setting up of the Iveco commercial vehicles group, itself representing something of a lead in the process of European industrial integration.

However, Fiat now appears to be intent in returning to its primary vocation of the car business, currently accounting for about 40 per cent of the groups overall business. A large slice of the group's three-year L3bn investment programme is to be dedicated to car activities and the Turin group is also seemingly looking towards its Spanish associate, Seat, to help it return to the top positions of the European car manufacturing league. Indeed, Fiat is currently holding talks with Seat which could eventually lead to Fiat taking a larger stake in the Spanish concern.

Paul Betts



The Alfasud from the Alfa Romeo range

Swedish manufacturers

CONTINUED FROM PAGE FOUR

SKr 395m while sales had climbed 21 per cent to just over SKr 9bn. The profit margin rose to 4.7 per cent of turnover in the second quarter, still far below the 10 per cent, recorded in 1973 but a considerable improvement on the 1977 level.

Car sales climbed by 22 per cent to a first-half total of SKr 4.9bn. This gain was largely due to the benefits of last year's devaluation but also reflected a five per cent volume increase. This in turn was made possible by the stock reducing policy Volvo adopted in 1977, which has opened the way for higher production this year, as dealers replenish stocks.

Around 135,000 cars were delivered to the final customer in the first six months. Volvo boosted sales outside Sweden by some 11,000 cars or 11 per cent, increasing its market share in almost all its markets. This gain offset the decline of about 10,000 cars in domestic sales, where however Volvo maintained its market share.

Volvo has been pursuing an offensive market policy, passing on to its customers the major part of its devaluation gains and even cutting the price of its 240 models on the Swedish market. This has substantially improved its price competitiveness, particularly against the German cars, but leaves open the question of how long it can push for volume increases at the expense of profit margins.

After dipping into the red last year Volvo's car business is understood to be back in profit but earnings are still far from adequate and the car factories are still operating well below capacity, even though output has been raised and more workers taken on in Gothenburg. The real profit generators remain the trucks and the aircraft engine production for the Swedish Air Force.

Volvo still has to bring its Dutch car production into profit, although here too there has been a radical improvement this year. The European sales of medium-sized 343 are reported to have climbed by around 40 per cent during the first half of the year, while in Sweden the Dutch-built car became the third best seller.

Refitted with a manual gear box and with the production problems occasioned by its premature launching ironed out, the 343 now appears to be in a much stronger position to fulfil Mr. Gyllenhammar's hopes of capturing a larger segment of the market for Volvo. Last year's results were dismal. The Dutch factory at Born produced only 54,500 cars (including the 46 and 66 models as well as the 343) and returned a loss of Fl 125m ($57m).

But the new arrangement under which the Dutch Government has increased its equity stake in Volvo cars by 45 per cent and made available interest-free loans gives Volvo a breathing space until 1980 to get the Dutch operation properly organised and profitable. There is still a long way to go. The Born plant needs to build about 100,000 cars to return a profit.

Volume

Saab-Scania has adopted a different policy from Volvo's. Instead of competing in price and pushing for volume, it is steadily moving up market into increasingly specialised models with larger profit margins. The cheapest of its new 900 models is some 20 per cent more expensive than the regular Volvo 240 car.

Saab is investing about SKr 135m ($30m) in new production facilities for the 900, which has a re-designed chassis and a longer wheel base, giving, it is claimed, exceptional road behaviour. The turbo car, which was highly favoured in the trade press, and the 900 make up the spearhead of Saab's campaign to build its own niche in the specialist market.

They could also be seen as the final effort to prove the viability of car production at Saab-Scania. The abortive merger with Volvo was largely the idea of Mr. Marcus Wallenberg, Saab-Scania's chairman, and was prompted by the knowledge that the Scania truck division has had to "carry" Saab cars for several years. With the break-down of the merger talks the Saab engineers are now forced to demonstrate that they can produce cars at profit.

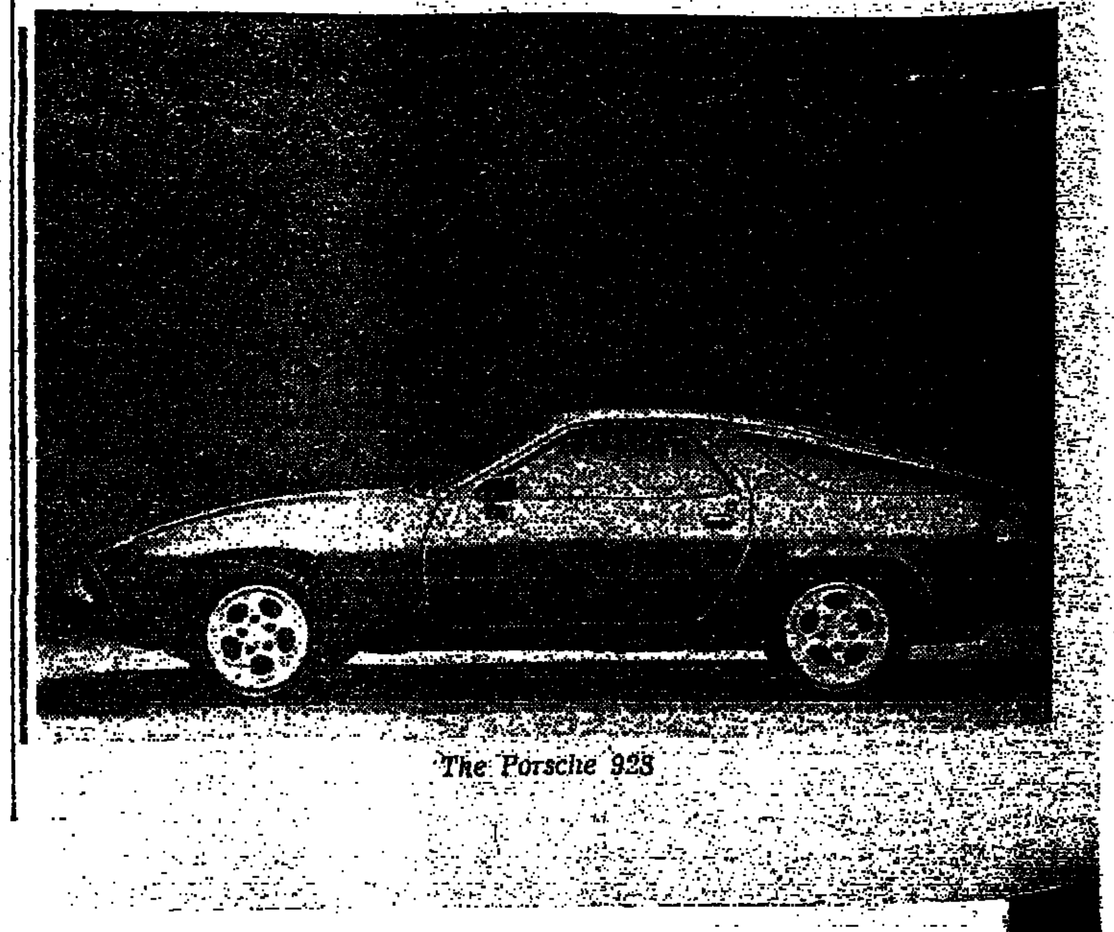
Their performance this year has been promising, even though the investments involved in producing and marketing the new models will probably shackle any immediate move towards profit. Car sales advanced by 14 per cent to SKr [illegible] during the first six months and encompassed a volume increase of about 5 per cent on foreign markets.

Deliveries to the U.S. market rose by 15 per cent to over 9,000 cars during the first seven months, while on the home market which annually takes over half its output, Saab succeeded in increasing its share from 11.3 to 12.5 per cent during the first six months. By October the management was sufficiently encouraged to raise the production level to 90,000 cars a year.

This is still some 20,000 below capacity and below the level it had previously been assumed Saab would need to yield a profit. But last year Saab delivered less than 76,000 cars and allowing for the higher profit margins on the new turbo and 900 cars, it must be gaining ground.

William Dullforce

The sturdy Volvo 244 DL



The Porsche 928

The next section examines the different market sectors and discusses the new models that have been introduced recently. Manufacturers are now adopting a policy of attempting to offer to their customers a complete range of models.

New approach to model policy

ONE OF the most striking features in the development of model policy among the European car companies during the past few years has been the establishment of a new approach to model policy based on offering customers a complete range. This is a relatively recent change. Twenty years ago many European car companies made only one basic model. In the mid-1950s, for example, Peugeot's success was based simply on the 203 model; and even more recently, while Volkswagen had little more than the Beetle to offer, Citroen was existing on a bizarre combination of its compact 2CV range and its large luxury DS Series. Today, every European producer of note tries to span the three basic zones of small, medium and large cars.

This strategy is based on the need to achieve large-scale manufacturing both to reduce costs and maintain more effective distribution. On the cost side, a wide range of cars means that many components can be produced in longer runs (and therefore more cheaply) because they can be used in more than one model; on the distribution side, a variety of vehicles gives dealers the opportunity to create larger and more viable businesses.

To achieve these aims, two distinct policies have been developed and refined by European manufacturers in the past ten years. The first approach, popularised by Ford, has been one of ruthless rationalisation. Although the company has recently expanded its coverage of the market by adding the small Fiesta model at the bottom of its range, it still has only four basic models (the Fiesta, Escort, Cortina, and Granada) throughout Europe. The sporty fastback Capri model, which has proved immensely profitable for the company, uses mostly Cortina parts except for a few body panels.

This policy allows Ford to appeal to a fairly select executive market at the top end with the Granada (designed with a very close similarity to a Mercedes), and to the small family saloon market with the Fiesta. At the same time, vehicles are driven by a range of only four different engines, which may be further reduced in numbers when the new plant in South Wales comes on-stream; and the company is believed to have plans to build its future range of cars on the base of only two body pans (the bottom pressing on a car which is the most difficult to make).

No other company in Europe has quite achieved Ford's degree of rationalisation, although Opel and Volkswagen have moved in the same direction. Indeed another group of manufacturers, led notably by Renault, has sought to achieve wide market coverage by an entirely opposed method of model proliferation. Renault's concept has been to spawn new models regularly, filling niches in the market and not necessarily abandoning its established vehicles. The result is that today it has eight extant models to cover the same market as Ford embraces with four.

Renault's approach has proved ideal for a company in a rapid growth phase. It has been expanding so quickly that each new model has been able to move the company into a new area of demand and it has had sufficient backing from the French State during this period not to have to worry too deeply about profitability.

Intrinsically, of course, this approach to model policy must be more expensive than Ford's. But it is not necessarily as expensive as it looks. Renault, for example, has achieved a great deal of rationalisation in its cars under the bonnet—it uses a range of five engines only—and has reduced component costs by entering into a number of joint manufacturing agreements with other groups. Its use of hatchbacks, rather than a variety of saloons and estates, across most of its range also helps to cut down on panel production.

The biggest dilemmas in model policy, however, have probably been faced by the specialist producers in the past decade. Their problem is that they are being attacked by the popular car manufacturers, who are all adding quality cars to the top of their ranges, while being unable to achieve more economic production runs or to offer their dealers a variety of models. At the same time, they are now faced with the need to reduce fuel consumption.

In Sweden, Volvo has approached this problem by moving into the medium-size family saloon market with the acquisition of Daf in Holland. In Germany, BMW has also given greater variety to its range by attacking Mercedes at the top end with its luxury 7 series limousine, and designing two ranges of compact and medium size saloon models. Mercedes itself is believed to be considering a move into the medium-size family saloon market smaller than its 200 Series, partly because of the need to achieve better fuel economy results in the important U.S. market.

Thus, at present, there is a clear move towards the convergence of the specialist and volume car manufacturers in Europe. Some analysts argue that this will ultimately lead to more mergers and industrial rationalisation, rather in the way that General Motors absorbed Cadillac, the U.S. specialist manufacturer, in the 1920s. To a certain degree, this has already happened with the takeover of Rover and Jaguar by BL in the UK, of Lancia by Fiat in Italy, and of Audi by Volkswagen.

The argument against this trend is that such amalgamations are intrinsically difficult to manage. BL has gone bankrupt in the process, Lancia has lost £150m since it was taken over in the late 1960s, and VW also went through a difficult patch in 1974-75. But if European companies continue to pursue the principle of comprehensive model ranges—and all the pressures of the market are in that direction—it is difficult to escape the logic of further amalgamations.

T.D.

PERCENTAGE OF TOTAL CAR SALES IN 1977

Country	Small cars	Medium cars	Large cars
Britain	16	59	25
W. Germany	15	46	39
Austria	16	56	28
Benelux	21	49	30
Finland	18	64	18
Denmark	25	59	16
France	35	43	18
Ireland	19	69	12
Italy	52*	33*	15*
Netherlands	19	61	20
Norway	10	51	39
Portugal	45	48	7
Spain	47	47	6
Sweden	8	43	49
Switzerland	17	50	33
All W. Europe	27	47	26

*Denotes nine months actual sales, final quarter estimated.

The medium range

ALTHOUGH, AS might have been expected, sales of small cars did well after the oil crisis, the major long-term impact seems to have been on the medium-car market. It has climbed steadily ever since and last year represented 47 per cent of the 9.86m cars registered in West Europe.

In some countries the medium-sized car was well ahead of the rest of the field. In Britain, for example, it accounted for 59 per cent of total sales last year. In Denmark the percentage was 59, in Finland 64, Austria 56, Ireland 69 and the Netherlands 61.

The main reason seems to be that this is the type of vehicle which best fits the needs of the average family, providing four to five seats, reasonable room inside, adequate luggage space and economy combined with reasonable performance.

The kind of car to fill these specifications is typically represented by the Ford Taurus or Cortina (same car, different name) which, in fact, last year was the best-selling vehicle in this market sector in the whole of West Europe. It took 4.1 per cent of total sales of cars of all types.

In European terms, in 1977 the other popular medium-sized cars included the Volkswagen Golf, 3.7 per cent of sales; the Opel Kadett, 3 per cent; the Opel Ascona (or Vauxhall Cavalier in its British form) 2.9 per cent and the Ford Escort with 2.3 per cent.

All the major manufacturers have at least one model in this part of the market and it is extremely competitive. So only in a few countries is there one model which outpaces the others in sales by a reasonable distance. In Britain by mid-1978, however, the Cortina had a commanding lead with 11 per cent of total car sales compared with the 7.5 per cent taken by its stablemate the Escort.

In Italy, too, the mid-year market leader was well ahead of the rest of the field. The Fiat 128 had 7.4 per cent of total sales and its nearest rival, the Fiat 131, had 4.1 per cent. One company also dominated the competition in West Germany. The Volkswagen Golf had 8.3 per cent. of total sales and the Passat 6.2 per cent, both above the Opel Ascona's 5.9 per cent.

Lead

Elsewhere in the major car-buying West European countries, the Taunus was Belgium's best-selling medium car with 3.6 per cent of total sales with the Toyota Corolla taking 2.9 per cent in second spot. The Citroen GS held the lead in France in mid-1978 with 5.5 per cent of sales ahead of the Simca 1307/8 with 4.7 per cent. How long they will hold this lead in France is a matter for conjecture. Two newcomers, the Horizon from Chrysler and the Renault R18 introduced only in April, have proved exceptionally popular. The Horizon clocked up 4.6 per cent of total sales and the R18 2.9 per cent half way through this year. The Horizon actually took 6.3 of the market in the month of June.

In the Netherlands by mid-1978 the Opel Kadett had taken 6.7 per cent of sales with Ford's Taunus at 5.6 per cent. In the Government-controlled Spanish market, the Seat 131 had 8.3 per cent at the half-way stage in 1978 and the Seat 124 had 8 per cent. A feature of the market this year has been another Chrysler success. The 150, new to Spain this year, has captured 5.9 per cent.

The popularity charts illustrate, once again, that the indigenous European car manufacturers rely heavily on their home market to keep up their sales. In particular Fiat had 55 per cent of its home market at mid-1978, and Renault 33 per cent of French sales. Only in Spain, where both have associated manufacturing activities, do they get anything like these market shares: Fiat/Seat has 34.9 per cent and Renault 28.5 per cent.

In this context BL might have started the year badly and had only 22.6 per cent of the UK market half-way through 1978 but this was far and away above its market share anywhere else in West Europe. Only in Portugal, where it took 9.5 per cent, did its market share approach 10 per cent.

Another significant factor in the medium car part of the market is the Japanese competition. The Japanese manufacturers have done particularly well in some markets. In Britain at the mid-1978 the Datsun Sunny had taken 2.3 per cent of total sales and was the 7th-most popular medium car. As previously mentioned, the Toyota Corolla actually held second place among medium cars in Belgium half way through this year. And in the Netherlands there were two Japanese models among the top 10 medium cars, the Mazda 818 having 3.5 per cent of the market and the Datsun Sunny 2.1 per cent.

As might be expected, there is an almost constant trickle of new contenders in the medium part of the market. Apart from Horizon from Chrysler this year (it sold more than 100,000 units in the first six months in France and will do well in the UK now it has been launched) and the Renault R18, the Peugeot 304 and the Fiat Ritmo entered the field in 1978. And Volvo's chances of making better inroads into the medium sector should have improved now there is a 343 which has a manual gearbox as well as the Variomatic automatic change carried on from the old Daf days.

Kenneth Gooding

Estate cars broaden their appeal

ONE CAN either view it as a revolt against increasing standardisation which makes so many cars look alike, or more and more people seeking a vehicle that will perform a number of jobs and because of its individuality will be fun to drive. However, one views it, there can be no doubt of the growing interest in off-the-road machines. This is not especially because they will spend a lot of their time driving along forest tracks, across fields or up mountains, but because they fit better into a society that is increasingly being labelled DIY.

The estate car, with its bigger load-carrying capacity took time to broaden its appeal with motorists partly because the country's ratio of car-owners was relatively small and the two-car family was just beginning to emerge, and partly because estate cars were not widely available. It was also easier to find artisans and others to come and take away the tree loppings, to bring the bricks, sand and cement and so on.

Owning a dual-purpose car could often avoid the need to rent a van for the odd occasion, like taking the furniture home from an auction.

The gap between a full-blown estate car and a family saloon has been neatly bridged by the hatchback, but it still leaves many people looking for something that will tow the caravan across muddy sites or the boat over the seashore. An off-the-road or rough terrain vehicle which at one end of the scale will double as a family runabout and at the other cope with rugged farm and cross-country conditions, or be just the job for a one-man bricklayer's or carpenter's business is answering a lot of different requirements.

Unhappily a good many of these vehicles are imports, perhaps because of the dominating influence of the Land-Rover or, in the saloon-type class, the Range Rover. Both models are top of their class and their performance is unexcelled. The Land-Rover is as much at home in the arid Middle East or swamplands of South America as the Range Rover is standing outside the office or towing the sailing boat. Both are sophisticated machines and not cheap. What many people are looking for is something simpler and in the price brackets they can afford. A differential lock to provide two-wheel drive, plus perhaps a winch to enable it to be towed out of trouble, is all they are looking for.

Chrysler's Matra Rancho from France flatters the outdoor, rugged ego and is a useful vehicle for poor conditions, but it should not be over-relied on for getting out of mud, since it has a conventional drive which allows a rear wheel to spin. The French call it a "car for all roads," and this is as good a description as any. Some of the challengers in this field come from Eastern Europe, like the Lada Niva, a short wheel-base saloon from the Togliatti factory in Russia. The drive from the 1570 cc version of the Fiat engine is taken back through the gearbox to a fore-and-aft differential having a central differential lock which can be engaged on the move. The change from high to low ratio can also be done on the move with some gear crunching, and is best done at rest. An output of 50,000 a year by 1980 is planned. The Subaru from Japan is an interesting example of a two or four-wheel drive estate in which four wheel drive can be engaged on the move, and is partnered by a pick-up.

The power unit for the models is a horizontally opposed four cylinder, 1600 cc water cooled aluminium alloy engine driving the front wheels. It runs on two star petrol. Another newcomer is the Portuguese version of the Rumanian designed ARO, the Portaro, which has a Daihatsu 2.5 litre petrol or diesel engine. Included in several European components are Girling brakes. It has been seen only by the trade, but the intention is to import 1,250 next year.

Flanking the Land-Rover on either side are the Yak Yeoman, a utility vehicle based on the 1300 cc Ford Escort van from Manchester Garages (Motor Craft), and the Stonefield Vehicles duo from Scotland with carrying capacities of 1½ to 3½ tons. In their very different ways they complement the Rover range rather than compete with it. Significantly both are receiving official financial support, with the Scottish Development Agency having taken a 75 per cent stake in Stonefield, whose chairman is former Rover managing director, Mr. Bernard Jackman. The Yak Yeoman is still in the pre-production stage, with 50 vehicles expected by the end of the year, of which 40 will have left hand drive. This indicates the markets at which it is aimed, primarily the developing countries where repair and servicing facilities are fairly rudimentary.

By linking with Ford the vehicle is assured of world outlets and service back-up facilities. The 1300 cc power unit comes complete with carburettor plan, belts, dynamos and other components. The rear axles are being modified to incorporate the Suredrive differential locking device designed by Mr. Bob Stocdley, Manchester Garages chairman. This is an indexing device in common use in plant and machinery. On a corner it allows the outer wheel to freewheel, and power to both wheels is restored when they are again rotating at the same speed. When one wheel spins on muddy ground power is transferred to the other until both are turning at the same speed again.

This indexing, or racheting occurs up to five times a second. The vehicle is also fitted with a winch, so that it can pull itself out of trouble. A strong feature of the design is its simplicity. The chassis is in seven parts in tubular section with the idea that any reasonably competent amateur mechanic can take it apart or put it together. The six body panels are in TI's new lightweight alloy Supral, and the wing pressing fits any corner of the vehicle, while the dash panel accommodates both left and right hand drive. The original gearbox fitted with the Suredrive weighed 148 lb, but this has been redesigned by Fairey Winches and now is down to 38 lb. The vehicle weighs about 16½ cwt and should sell for around £3,000. A 1600 cc version called the Yak Yarriman, is in prospect for the Australian market, Yarriman being aborigine for a willing horse.

Like the Yak, the two Stonefield vehicles borrow major components from vehicle manufacturers with worldwide networks. The power units are standard Ford 3-litre or Chrysler 5-litre engines with automatic gearboxes allied to Ferguson Formula units made by Borg-Warner that delver one third power to the front wheels and two-thirds to the back. A self-energising clutch automatically locks to prevent wheel spin. The vehicles are, as will be appreciated from this brief description, sophisticated units of robust construction for civilian or military duties.

A nearer competitor to the Land-Rover is the Daihatsu, with a 1600 cc engine driving the rear wheels and looking rather like an early Land Rover. The free-wheeling front wheels, which save fuel (and reduce noise) are lockable to provide extra traction. At about £4,000 it is some £300 under the comparable Land-Rover price, but lacks some of the inbuilt features like aluminium panels.

Other challengers from Japan are the Toyota Landcruiser, which, though withdrawn from the UK is popular in the Middle East and other markets, and the Nissan Patrol, like a small Land-Rover. While the orient is making strong efforts to get established in the UK cross-country or leisure vehicle market, the exchange rate with the high valued yen is a damper to sales. On the other hand the lowly dollar makes it seem likely that Europe will see a growing number of Jeeps and Cherokees from American Motors, Blazers from General Motors, Trailbusters from Chrysler and perhaps even Scouts from International Harvester. While such examples are coming into this country in increasing numbers, and are well-appointed and sophisticated vehicles they are linked more closely with leisure pursuits than with the more rugged image of the Land-Rover. Its stable mate the Range Rover is likely to feel the impact more.

The variety and numbers in which these imports are coming in illustrates vividly the rapidity with which the market is developing in volume and range. While some of them challenge the Land and Range Rovers, it is sometimes more apparent than real. The Land-Rover has been around for 30 years and the Range Rover for nearly 10. They cover fairly well-defined sectors of a very difficult market to get into. Rover's strength can perhaps be illustrated by the reminder that it is one of the very few, if not the only company to have shaken off a Japanese challenge (from the Landcruiser) and to have come back even stronger, not least because Rover has been chosen as the better vehicle.

All the same, production of 45,000-50,000 Land-Rovers and around 10,000 Range Rovers a year has been static in a market that has been growing by about 5 per cent annually and now looks to be accelerating. At long last the first phase, costing £30m in an overall £280m programme to modernise and expand output has been started. This is designed to increase Range Rover production by 50 per cent and Land-Rover by 10 per cent. By the time the project has been completed production will have been doubled to 100,000 units or more annually, with updated and more sophisticated vehicles that nevertheless will retain their basic concepts. No one is going to take Rover's 85 per cent of business with governments or its dominant place in the home market away without a fight. "We have to keep on our toes to protect the sectors of the market we are in for the future," says Mr. Mike Hodkinson, Land-Rover's managing director. "We are not thinking of branching into new sectors." That will be up to people like Manchester Garages and Stonefield Vehicles.

Peter Cartwright

The VW Polo GLS, new for the 1979 model range

Chrysler's Matra Rancho—the French call it a "car for all roads"

Americans attack the top end of the market

THE BRITISH will get their first chance to see General Motors' contenders in the up-market car sector at the International Motor Show in Birmingham. On view will be the Opel Senator and Monza, together with their UK equivalent, the Vauxhall Royale. The Vauxhall Carlton, really an Opel Rekord under the skin, will also be launched. These are the cars with which GM is to make a determined push into the market for "plush" cars—plush that is in terms of size and interior trim.

GM says boldly that the Senator-Royale models can take on Mercedes, BMW and Jaguar, a claim which clearly must be taken with a large pinch of salt but which neatly illustrates GM's approach. Ford, GM's major rival in world terms, took the lead in Europe in this particular marketing ploy. The Granada has been on the market long enough to warrant a new version, launched in Frankfurt in September.

The American groups simply could not ignore a sector of the European market which represents not only about 25 per cent of total sales (actually 26 per cent in 1977 or 1.97m units) but is also the most profitable end of the business.

Responded

They now also have "executive" cars worthy of the name to offer the fleet buyer who prefers to purchase all his vehicles from one manufacturer. Ford's chairman Sir Terry Beckett frequently reminds us that "Ford can supply everything a company wants from an Escort for the junior sales rep. right through to a Granada Ghia for the chief executive."

The American companies have responded to the marketing strategies of the indigenous European producers in the last ten years. During this decade Volkswagen, Fiat and BL all acquired specialist producers which have been added to the top of their ranges to give them a very broad coverage of the market.

The French trio (later to become a duo) Renault, Peugeot and Citroën followed the principles of this marketing philosophy by developing their own executive cars. The result is that Europe has a large number of companies offering quite similar product ranges and all attracting reasonable slices of the executive car market.

In 1977, for example, Mercedes' models accounted for 3 per cent of total Western European car sales, at around 295,800 units sold. The Peugeot 504 range had a 2 per cent share with around 197,200; Opel's Rekord had 1.9 per cent or 187,300; Ford's Granada 1.8 per cent or 177,500 and the Audi 100 had 1.6 per cent, about 158,000 cars sold.

Of course, demand for larger cars is stronger in some markets than in others. It is almost possible to plot a chart of those countries with Europe's highest standards of living simply by referring to the sales of big cars.

The share of the available market taken by large cars in 1977 was particularly high in West Germany (39 per cent), Norway (39 per cent), Sweden (49 per cent) and Switzerland (33 per cent). And last year provided a fairly typical demand pattern in all these countries. There is one particular anomaly. Denmark's low percentage of large cars sold—16 per cent—reflects a system which taxes cars by size and grows progressively steeper at the top end of the scale. The French performance in this sector, too, shows some impact of taxes which rise very sharply on cars over the 2-litre mark.

It is interesting, in passing, to see how the individual models were placed in the major markets halfway through 1978.

In Britain the Granada topped the list with 2.5 per cent of total sales (not just those in the big car sector), closely followed by the Austin Morris Princess (2.4 per cent) and the Rovers (all engine sizes) 1.9 per cent. Volvo had a useful 1.2 per cent.

In West Germany the Opel Rekord accounted for 7 per cent of total car sales; the Mercedes 200 series, 5.7 per cent; the Granada and Audi 100 each had 4.6 per cent; the BMW 300 series 3.3 per cent and the BMW 500s had 1.6 per cent.

The Peugeot 504 topped the list in Belgium with 3.6 per cent of all car sales. The Opel Rekord followed with 3.5 per cent; the Granada had 2.3 per cent; the Citreon CX 1.7 per cent; the BMW 300s and the Mercedes 200s each had 1.6 per cent and Volvos 1.5 per cent.

Popular

The Peugeot 504 was also the most popular big car in France with a 5 per cent market share half-way through 1978. Citreon CX, 3.6 per cent; Renault's R20/R30 series, 3.5 per cent; and the Renault R16, 1.7 per cent, followed.

With a 3.2 per cent total market share, the Peugeot 504 was top of the big car list in the Netherlands, too. There was a big gap before the Opel Rekord came into the reckoning with 2.6 per cent; the BMW 300s had 1.5 per cent; and the Granada 1.1 per cent.

Publication of statistics in Italy is always well behind the rest of Western Europe. But it is possible to estimate that in 1977 the Alfa Romeo Alfetta was Italy's favourite executive car with 2.7 per cent of the market, followed by the Lancia Beta; 2.1 per cent, the Fiat 132, 1.7 per cent and the Rekord with 1.1 per cent.

These placings might not be particularly illuminating except that they show that individual European markets prefer local products when they can get them. They also show that, just as in the small sector of the market where the Mini still has its adherents, an ageing model like the Peugeot 504 retains a great attraction among the bourgeoisie of Europe.

The 504's brother, the Peugeot 604, is certainly one of the most interesting of the new entries to the executive market in recent years and appeals to the conservatism of many buyers in this sector. But, unlike the two other big French executive cars, the Citroen CX and the Renault 30, it was not designed to be made in large numbers.

It is a pity that the various problems and constraints which have bedevilled production of the Rover in the UK has not allowed the car to test its full potential in Europe. There is no doubt it appeals to the Continental Europeans because it followed a Car of the Year award with a major Italian styling prize.

The policy within BL's Jaguar-Rover-Triumph division at the moment is for Rover to take responsibility for big executive models, Triumph for sports cars and Jaguar for the top-of-the-range, Mercedes-type vehicles. The new Rover plant has a capacity of about 150,000 units a year, and Jaguar of about 40,000. For most of this year Rover was working at only one-third of nominal capacity but output has recently been increased and JRT executives are taking a new look at Continental distribution arrangements to prepare for the day when there are enough Rovers available to make a European re-launch a resonable proposition.

In spite of continuous chat about over-capacity in the big car sector, BL is not the only company to have become involved in considerable capital expenditure recently.

Mercedes, with a current manufacturing potential of about 370,000 units a year (and a 40-month waiting list in Germany itself) is expanding by launching a new range of estate cars which will increase annual output to around 430,000. Elsewhere in Germany, BMW has remodelled the whole of its range since 1975. It made 275,000 cars last year and is aiming for 285,000.

Volkswagen has settled into a strategy which gives the Audi marque responsibility for its big, quality cars. Production of the new 100 model is touching capacity at nearly 200,000 units a year. And the Audi 80 has been enlarged and remodelled to considerable effect.

In Italy Fiat has made Lancia a separate organisation responsible for a range of more luxurious cars, in the VW-Audi pattern. Total capacity at Lancia is about 80,000 a year but this includes Autobianchi in the Mini-type market, the Beta in the middle sector as well as the new Gama at the top of the range.

Output

Volvo's potential output of big cars is 250,000 a year. Its Swedish neighbour, Saab, has been losing money on its car business and has cut back production to about 100,000 units annually.

This leaves Ford and General Motors to be dealt with. Ford has transferred all production of the Granada to Cologne in Germany and output this year has been at the rate of more than 300,000 annually. Output of Opel's Rekord is running at about 180,000 a year, with the new Senator and Monza lines (together with their UK equivalents) having a planned production of around 30,000 next year.

The combined capacity of all these producers is close enough to the present level of demand to pose no immediate problems of over-production in crude terms. But there is clearly going to be much jockeying for position in the next few years. And if the two American giants do succeed in pushing up their shares of this market segment, somebody else will lose out. That could make life very difficult for some of the smaller companies.

K.G.

Sports cars retain their share

THE WEST European market for traditional sports cars of the type represented, say, by BL's Spitfire or the Matra-Simca Bagheera is relatively small, representing only 0.3 per cent of total car sales of around 25,000 units a year.

However, there are many motorists who hanker after a sporty image yet have to compromise and settle for something more practical than a small two-seater. Sales of coupe versions of volume saloon cars which meet this demand are much higher, around 295,000 units annually and roughly 3.5 per cent of the total West European car market. Typical of such cars are the Opel Manta and the Ford Capri.

Then there is the luxury end of the sports car market, the world of the Jaguar XJS and the Porsche range. West European sales of these types are roughly the same as those for the traditional sports car—24,000 units or 0.3 per cent of the market as a whole.

Traditional

To deal with traditional sports cars first, demand has been remarkably steady although noticeably affected by the oil crisis. In 1973, for example, sales throughout West Europe reached 28,000 or 0.4 per cent of the market. In 1975 they slumped to a low point of 18,000 or 0.27 per cent of total sales.

Last year and in 1976, however, in this sector of the market around 24,000 cars were sold, representing a "typical" 0.3 per cent of total sales in 1977.

This type of vehicle has more appeal in some countries than in others. Britain has consistently been a very good—relatively speaking—market for traditional sports cars. In 1977 for example, sports cars of this type accounted for nearly 2 per cent of sales. Belgium, where traditional sports cars had 0.5 per cent of the market, Switzerland, 0.5 per cent, France, 0.4 per cent, and the Netherlands, 0.35 per cent, also help keep the average up in West Europe as a whole.

Of course, in volume terms Europe represents nothing like as juicy a market as the U.S. Success in the States can make all the difference to a sports car. For example the Datsun 280Z sold around 60,000 units in the U.S. last year while BL notched up 50,000 units with MGBs and TR7s and the Midgets and Spitfires between them commanded more than 15,000 units sold. In this context it is easy to understand why BL is determined to get the TR7 right for the American market. With the vast majority of sales made on the West Coast, convertibles are in great demand. At first BL felt that the stringent legislation in the States prevented a soft-top version of the TR7 being made available. Now it is sure it has solved the problem and a convertible TR7 with other modifications will soon be on sale in the U.S.

In West Europe, the BL range is spearheaded by the Spitfire which is widely available throughout the territory. The Midget and the MGB are not for the moment available in Continental European markets and last year there was soft-pedalling on the TR7 while preparations for its re-launch were made.

In spite of this, BL's share of the total West European sales in the traditional sports car sector represented 28.5 per cent. The Spitfire alone had a 20 per cent share, having performed progressively better since 1974. Comparing 1976 and 1977, its market share jumped from 13 to 20 per cent and this involved a 50 per cent increase in volume. The Spitfire is doing exceptionally well in West Germany in spite of BL's traditional weakness in the car retail business there.

Competition

The Spitfire has some way to go before catching up with the sector leader, however. The Matra-Simca Bagheera had a 30 per cent market share in West Europe last year.

The rest of the competition comes from Italy, in the shape of the Alfa Romeo Spyder series, the Lancia Beta Spider, Monte Carlo and Stratos, and the Fiat X19; from West Germany with the Opel GT and the VW/Porsche 914; France with other Matra models and the Renault Alpine; Japan represented by the Datsun Z series; Morgan in the UK and a handful of other makers scattered around Europe but between them contributing only 200 units in the past five years.

The significance of the UK market compared with the rest of Europe is reflected in Fiat's decision to launch the new version of the X1/9 first in Britain before it goes on sale in Continental Europe or the U.S.

The earlier version of the car has proved particularly popular with the British and after its introduction in January, 1977, more than 3,500 were registered in the first 18 months, in spite of supply constraints at the factory in Turin.

The post-oil-crisis slump affected the luxury sports cars and coupes even more severely than traditional sports cars. Sales of 22,000 units or 0.32 per cent of the market in 1973 plumetted to 12,000 or 0.19 per cent in 1974. But they bounced back just as sharply and have continued to improve, reflecting above all the affluence of West Germany. Of the 24,000 units sold last year (0.31 per cent of total car sales) West Germany accounted for 17,000 of them.

Porsche, with its 911s, 924s and 928s captured 57.5 per cent of total West European sales of this type of car. The Porsche company is family controlled still and a private concern.

In the 1978 model year—which ended in September—the Porsche factory in Germany produced 35,900 cars compared with 37,157 in the previous 12 months. About 3,000 vehicles were lost during the month-long metalworkers' strike in the Stuttgart region.

Thanks to their very strong home market demand other West German companies also had dominating positions in this luxury sector. Mercedes' SL and SLC ranges accounted for 20.5 per cent of West European total sales in the sector while the BMW coupes and 600 series took a 17 per cent slice of the action.

This did not leave too much for other contenders. BL's Jaguar XJS is aimed at the Continental market as well as the U.S. but sold only 500 units in Europe last year. The same group's Triumph Stag is being phased out as are the Citroen SM and Alfa Romeo's Montreal. The Volvo 1800 ES is still a contender, however.

Consistent

And there remains the exotica, not only of this sector but of the car business as a whole, represented by Lotus, Lamborghini, Maserati, Panther and the rest.

Although the demand for coupe versions of more conventional saloon cars—the kind of vehicle which allows the ordinary driver to fantasise just a little—has remained fairly consistent, there are more models to share the sales.

In each of the years from 1973 to 1977 unit sales and market share was 273,000 and 3.87 per cent, 215,000 and 3.46 per cent, 211,000 and 3.23 per cent, 297,000 and 3.97 per cent and 291,000 and 3.7 per cent respectively.

Best-seller in this part of the car market is the Opel Manta and its success over the same period reflects just how essential modernity in styling happens to be in this business. In 1973 the Manta had 20.5 per cent of this sector's sales; in 1974 it was 12.5 per cent, in 1975 it was 19.5 per cent, 1976 saw it up to 34.5 per cent and last year it was 28 per cent. No prizes for guessing in which years the model was given a facelift.

Once again reflecting the West German liking for sporty cars—after all, it is one of the few places in Europe where there are suitable roads and lack of speed limits which make such motoring a joy for the enthusiast — Opel's nearest rival in this sector is the Volkswagen Sirocco with 18.5 per cent of sales in West Europe.

Ford's Capri, also a German-made car, has a respectable 10.5 per cent, the Renault R15/17 range 8.5 per cent, and the Fiat 128 and 124 coupes over 8 per cent between them. Italy is also well-represented by the Lancia Beta coupe and HPE, and the Alfa Romeo coupes, Alfetta GT and GTE, and the Sprint.

This is a sector which interests the Japanese because of its size. Mazda's 121 RX5 and the Mitsubishi Colt Celeste are in the field but the greatest success has been the three-door Honda Accord with a 6.5 per cent market share (although some would argue about whether the Accord deserves a listing in this sector), and the Toyota Celica range had a 5.7 per cent share last year.

Kenneth Gooding

Small car battles

FIVE OUT of the top 10 best-selling cars in Western Europe last year were small cars. The most popular was the Renault R4/5/6 range which took 5.9 per cent of total car sales last year. The Fiat/Seat 127 was in second place with a 4.6 per cent share of the European market. Ford's Fiesta took 3.2 per cent and fifth place overall among all car sales. And the Volkswagen Polo, Derby and the Fiat 126 each had 2.2 per cent of the market and shared joint tenth place.

Perhaps the most significant feature is the impact made by the Fiesta. Ford pushed the car into the whole of Europe with one big shove rather than taking the traditional industry approach and introducing it gradually one market at a time. The Fiesta's performance was even more outstanding if you remember that it was not launched until February, 1977, and it was then another couple of months before double-shifting started in Spain.

The car is also assembled in the UK (Dagenham) and West Germany (Cologne) and naturally has made its major breakthrough in the three "home" markets. By the middle of this year in Britain it had caught up with the BL Mini and they each had a 4.8 per cent share of total car sales. They were well ahead of any other model in the small car sector.

In West Germany mid-way through this year, the Fiesta had romped ahead of the local competition represented by Volkswagen's Polo and Derby models to a 3 per cent market share against 2.3 per cent and 2.2 per cent respectively for the VWs.

And in Spain it took second place to the Seat 127 in the first half of 1978 with an 11.8 per cent market share against the Seat's 13.6 per cent. Ford has undertaken to export most of the Spanish-built Fiestas and to restrict its market share there in the full year to 10 per cent.

Even in Italy, where the small Fiats reign supreme—the 127 had 20.2 per cent of estimated total sales last year and the 126 accounted for 15.3 per cent—the Fiesta made an impression and moved into third place in the small car sector with a 4.2 per cent share of total car sales.

The question now is: When will General Motors move into this small car sector? The rivalry between Ford and GM is intense and the North Americans study each other's progress very carefully. Perhaps now that GM's Opel and Vauxhall subsidiaries have launched their top-of-the-market cars, the long-awaited dive into the small car pool will not be far off. Opel in West Germany has design and engineering responsibility for GM's European car operations, so that is the company to keep an eye on.

Profitable

It is understandable that Opel, one of Europe's most consistently profitable car manufacturers, should have dragged its feet and held back from a small car launch. This is a high-risk area.

To start with the customers for small cars expect, in the main, to pay less for them. But the sad fact is that it costs nearly as much to manufacture a small car as a medium-sized one. There are some savings on materials but the number of parts is likely to be almost the same and the effort of putting them together just as great as with a bigger car.

Other European manufacturers allowed BL (then BMC) pioneer the sector alone with the Mini—launched in 1959—for many years because they could see that it would be difficult to make reasonable profits on small cars.

Apart from Fiat with its range of baby cars no company made a serious attempt to follow the UK group.

But in the 1970s the major manufacturers one by one have followed BL into the mini sector. The Fiat 127 was followed by the Renault 5, the Volkswagen Polo, the Peugeot 104 (which is now providing the chassis and drive train for the Citroen Visa) and the Ford Fiesta.

Of course the oil crisis had something to do with all this. But that was not the complete story. The makers were also eyeing the development of markets in southern Europe where the people are less affluent and are natural customers for smaller vehicles.

On the marketing front too, the concept that each manufacturer should offer a logical range of products, from the small, inexpensive to the large, expensive, gained ground in the same way that it has in the U.S. for many years.

Mergers

Mergers in the European industry cut down the numbers of independent specialist manufacturers and allowed rationalised model ranges to emerge from the remaining groups.

Another important factor in the rise of the small cars has been the technological advance in component manufacture and vehicle assembly processes. Stronger and lighter materials, greater precision in engineering and longer life components make it easier to design more reliable cars. And production engineers who used to complain that it was difficult to put together front-wheel-drive cars have simplified the assembly process.

Front-wheel drive is a natural in small cars. The front-wheel-drive, transverse engine formula produces the best possible space behind the engine. The hatchback configuration gives the most acceptable luggage space at the back and the best aerodynamic shape. Most designers and stylists have settled for these solutions although, notably, the Renault 5 still uses an in-line engine unit.

In larger models, the argument for front wheel drive is not so clear cut since the bigger transversely-mounted engines needed to pull them along require a wider wheel-base, and increased drag by presenting a broader front end. In any case, wider models need some sort of shape like a transmission tunnel down the middle to keep them stiff.

There is also great appeal for the fleet operator in the traditional set-up of a longitudinal engine in the front driving the rear wheels via a prop shaft down the centre of the car. The major mechanical parts in this system can be readily removed and repaired—ideal for high-mileage, hard-used cars.

Last year 27 per cent of the 9.86m cars registered in West Europe were in the "small" category and certainly the Southern Europeans helped keep up the average. In Italy 52 per cent of the car market was accounted for by small ones; in Spain it was 47 per cent, in Portugal 45 per cent and in France (partly Southern European) 35 per cent.

This is also a sector which was succeptible to attack by the Japanese. The Datsun Cherry F11, for example, had 1.8 per cent of the UK total car market by mid 1978; in Belgium the Honda Civic was the small car market leader with 2.6 per cent of total car sales while the Datsun Cherry had 1.4 per cent. The Civic also topped the list in the Netherlands mid-way through this year with 2.5 per cent of total sales, pushing the Fiat 127 into second place, the Fiesta into third and the Mini down to seventh in the list.

In spite of this Japanese onslaught and in spite of the competition in the sector, companies are now making profits from their small cars. This apparently arises from a combination of circumstances. Companies are now able to make them in large volumes—Renault has the capacity to make about 400,000 R5s a year, Fiat about the same for the 127, Ford up to 500,000 for the Fiesta and BL something over 300,000 for the Mini—and they are taking a tough line on prices.

Prices have moved up across the board without any serious attempt to undercut—apart that is from the occasional marketing flurry that is a natural part of the retail car market. After the financial difficulties which have beset large parts of the industry during the past decade, the remaining groups have learned the lesson that they must make adequate profits if they are to invest in the future. For without that investment they will have no future.

K.G.

The next four articles examine the main areas of technical development. Manufacturers are striving to produce more economical vehicles and they are also having to cope with moves to make the emission regulations tougher.

Ways to cut fuel consumption

THE REQUIREMENT to display on windscreens of new cars, and in advertisements, fuel consumption figures for a set of standard tests—an urban cycle, 56 mph and 75 mph—introduces a form of standardisation that some motor industry sources believe will lead to mandatory legislation on fuel consumption. This is already the case in the U.S., where car makers have to improve the fuel consumption of their vehicles by an extra 2 mpg a year in five stages to 1985.

In view of the traumatic period through which the U.S. industry is passing, the prospect of facing parallel legislation is enough to strike despair into some British manufacturers. The Economic Commission for Europe, in choosing two speeds (the urban drive cycle is fundamentally allied to emission control) is being more realistic. Indeed, in the UK there is limited exemption for small, specialist manufacturers like Aston Martin. There seems to be no fear, therefore of ECE legislating at a rate that would damage the industry by imposing too harsh standards. In designing cars with very good power to weight characteristics Europe is far ahead of the U.S.

It is also worth noting that while at first glance the transatlantic requirements seem extremely strict, the consumption figure that has to be met is a calculated average of cars sold in each category, or model range, based on a previous sales year, or a declared volume of planned sales. If the worst comes to the worst, and it may well do along the line, the multi-nationals like General Motors (Vauxhall here, Opel in Germany), or Ford could meet their commitments by importing smaller European cars with low fuel consumptions.

This is not to suggest that U.S. producers are taking easy options: rather to state the technical hurdles they face. An immense effort in money, men and resources is being poured into searching for lighter weight materials to improve power to weight ratios and there is no shadow of doubt that the results will be of immense value to the European industry in still further stretching limited fossil fuels. The question is what premium will the customer be prepared to pay? And how can fuel consumption be improved if emission controls make it necessary to reduce engine efficiency? The 1979 emission requirement is already costing as much as $1,000 in detoxing equipment.

Lightweight materials as alternatives to steel and iron are most unlikely to be as cheap. Moreover, a sudden change in technologies could have an unpleasant backlash on supply industries. The imposition at too quick a pace of highly desirable and no doubt necessary controls on foundry emissions is reported to have put 400 of them out of business.

Anxiety

Events in the U.S. are therefore being closely watched here, not without some anxiety, but also with a good deal of expectation that some of the new technologies being developed will find their way across the sea. Certainly the scale and intensity of American research and development are exciting, even somewhat awe inspiring. One of the new materials, borrowed from the spaceship programme, is carbon fibre (CF), a resin-based reinforced plastic material with great potential as a weight saver. Finding out how and where it could be used on a car is expensive. Ford has spent $2m on an all-carbon fibre car which it is using as an engineering tool and mobile laboratory. The 1979 model Ford six-seater saloon weighs around 3,750 pounds. Although this is more than 750 pounds lighter than the 1978 model, a carbon fibre version weighs only 2,500, a saving of 30 per cent, which indicates something of the scale of possible savings. This experimental car is being used to assimiliate knowledge and study manufacturing feasiblity.

Examples of potential savings are a bonnet lid in *c/f* is 15 lb against 40 lb in steel: a door is 12.6 lb (30.2 lb); a transmission support bracket in c/f is 0.5 lb (2.3 lb). Among the dead weight items carried for safety reasons are door guard beams to resist side swipes. A modern steel pressing reduces this to 4 lb, but a carbon fibre version weighs only 2.5 lb. There are many other examples where c/f shields, cover and brackets could be used. Widespread use of c/f could, however, lead to extra noise, vibration and general harshness which would call for extra sound deadening, and so on. There are also manufacturing problems. In a modern steel press it takes 10-15 seconds to stamp out a part. In carbon fibre it takes three minutes.

In the UK the BRD company, part of GKN, has snatched a world lead in the production of carbon fibre drive shafts, of which GKN is the chief supplier here. But while there are substantial weight savings, cost penalties tend to limit applications to specialist vehicle producers. On the other hand if a c/f component can do the work of two steel components, as for instance in providing a single prop shaft instead of a divided one, then it comes competitive. Up to 60 per cent weight saving can be achieved with a composite shaft using aluminium alloy yokes. Currently the more practical solution appears to lie in alloy shafts, wwhich incur a much more acceptable 10-15 per *cent cost penalty but are* 40-45 per cent lighter than steel. This kind of equation is of great interest, not least to truck makers.

Another area in which Britain has taken a technical lead is in the new 10-20 glass from Triplex Safety Glass which enables one to fit 3 mm thick glass in the doors instead of a more usual 5 mm or, less common, 4 mm. The engineering possibilities of the new glass are to be seen at the Motor Show where the Austin Morris Princess with a glassback extension will be on view. This special model contains 50 per cent more glass area, extending the feeling of spaciousness. The Princess 2, which was the first car to switch to 10-20, also features a sun-roof only 2.3 mm thick which is opened by flexing the glass.

Glass is also in wide use in glass reinforced plastics for bodies for the Lotus, Reliant Scimitar, and three- and four-wheelers. Plastics together with aluminium and high-speed steel remain the three leading materials for weight reduction. Improved compositions and more detailed engineering that reduces the weight of a given component, in whatever material, are also combining to make vehicles lighter.

Aluminium is increasingly widely used in the engine compartment for overhead camshaft covers, sumps, clutch and gear housings, and for bumper parts, water pumps, brackets, and other components. Recent years have seen a great extension in the use of plastics both for trim and as engineering parts. A far from exhaustive list would include seating, grilles, fascias, lamp parts, wiper parts, door handles, bumper parts, scuff plates, down to the licence holder. High speed steel, used more in America than in Europe, finds its way into such items as body reinforcements, engine and bumper mountings, seat belt anchors, suspension arms, seat frames, and several other applications.

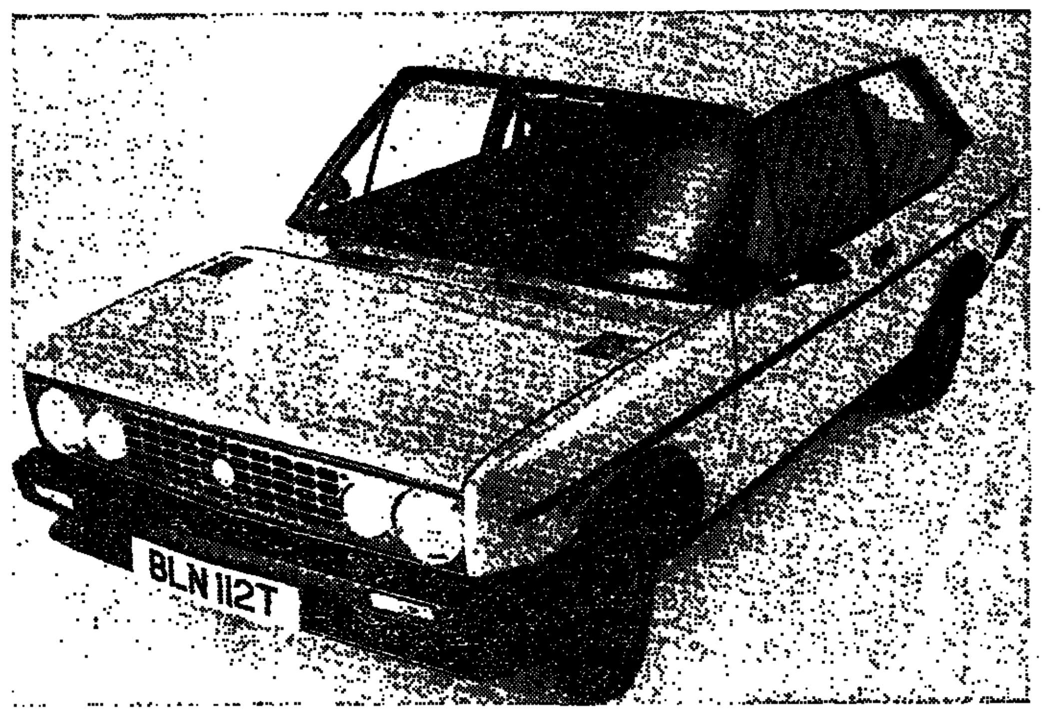
Comfort

Part of the reason for the tremendous concentration of effort and resources on weight-saving in the U.S. is the desire to retain the traditional roominess and comfort which in more fuel-free days put a huge, slow-turning engine into cars weighing two tons or more. Saving weight, and often size, plus more critical designs, are leading to rather smaller vehicles with the same interior room—a concept brilliantly realised by Sir Alec Issigonis in the original Mini. And when a *vehicle is made lighter* it becomes possible to make considerable savings in tyres, wheels, engine capacities and other functional components without losing in performance. The 758 lb Ford knocked off its 1979 model to bring the weight down to 3,750 lb includes 200 lb off the body structure, 110 lb off the engine, 61 lb off the brakes, 39 lb off the rear axle, *and so on*, a *fascinating* example of the way in which techniques are developing and accelerating.

Weight-saving exercises are also being conducted in the truck industry, though here the objective is not energy-savings as in cars but to improve load-carrying capacity. Designers are constrained by a maximum gross weight set either legally or by design. As a generality only the more specialist operators, like those undertaking trans-Continental trunking, are willing or can afford to pay a premium for some of the possible weight-saving methods. Weight-saving in the truck business means less a dash for alloy components and more in clever designing to make them lighter without, of course, impairing efficiency. This also has the effect of paring costs.

That is not to say lighter-weight materials like aluminium, *plastics and* high-speed steel are not being used in growing volume, but there can be problems. High-speed steel can be and is used in chassis frames, but n a long-wheelbase vehicle it could become a spring. It also has the drawback that one cannot weld it because it has been heat-treated to give it certain properties. It also complicates *repair or conversion.*

Aluminium, on the other hand, has more freedom of use for some components. Combined with a major redesign programme, Seddon Atkinson engineers have lopped some hundreds of pounds off the vehicle. A simpler bumper and lower cab saved 140 lb, while different axles allied to a new gearbox slimmed it by a further 620 lb, with another 390 lb being lost from the new rear bogie. Aluminium is used in the front bumper, a saving of 44 lb, and for the fuel tank. Some of this weight saving, however, only compensates for the increased weight of bigger, more comfortable and sophisticated cabs of a kind drivers are increasingly insisting on.



New from Fiat, the Mirafiori Sport

More controls on pollution

POLLUTION HAS become so emotive that well-intentioned legislation, some of it arguably unnecessary, is reaching the stage where energy conservation is being reversed in order to meet increasingly severe controls. For instance, while one can accept without hesitation that lead is poisonous a universally acceptable system of measurement that enables one to determine at what degree of concentration it becomes a health hazard has still to be devised.

While a great deal of work is going on in this country, elsewhere in Europe, in America and other industrialised countries, convincing clinical evidence is still lacking as to the part vehicle emission plays.

A commonly agreed system of measurement is deemed necessary since chaos would result if regulations in various countries were based on different methods of measurement. Europe is trying for universal standards on exhaust emission, as it is on safety standards, although this does not prevent any country from introducing its own legislation. Germany did so, and it has cost millions of pounds and pushed up the price of petrol.

In 1976 Germany introduced legislation which brought the amount of lead in a litre of petrol legally allowable substantially below what was general elsewhere in Europe. When Germany reduced it to 0.15 grammes per litre the generally accepted level was 0.5 grammes, since tightened to 0.4 grammes. It is believed that the UK and other governments will need to be convinced that below this level it constitutes a health hazard before contemplating fresh legislation, for the German experience is highly indicative.

Most people think of lead in petrol as the substance that gives it its anti-knock properties and that in some way the amount is related to the star system expressing octane value, with two star petrol containing less lead than four or five star. This is only partially true. Octane values are also determined by which of the three principal refining processes are being used, where the feedstock comes from, perhaps the Middle East or North Sea, and how the refining is biased. For example, there is an overlapping area where more naptha for the chemical industry can be extracted at the expense of petrol *for the pumps. Again, the re*forming process reshapes molecules and provides a much higher octane rating. The lead in petrol is there for the benefit of the engine to allow high compression ratios and therefore higher efficiencies. To an extent it is an alternative to a more expensive refinery process.

The German legislation forced oil companies to make substantial investments to upgrade processes at their refineries to provide the same anti-knock properties as before. Because the upgrading processes depend on heat and pressure, energy requirements at the refineries have been increased. In carrying through the changes tax penalties were imposed on companies not able to meet deadlines, and those that did conform were allowed to charge a higher price per litre.

Pollution

Pollution controls are also tough in Switzerland, where environmental issue are sensitive subjects, and where legislation is apt to be heavily influenced by referenda—and where there is no motor industry to bear the brunt. In America some of the measures are politically inspired and becoming so onerous that they are outstripping the technical knowledge of how to meet them, quite apart from the fact that they are running into a head-on collision with energy conservation. There is no doubt that the special smog problems in Los Angeles or, for that matter *Tokyo, justify especially* strict control. The trouble is that while regulations outside California and in other parts of Japan may not be as strict, they have to be met since it would be impractical to limit vehicles to certain areas of the country. Vehicles for the American and Japanese markets have to be specially prepared at considerable extra cost and the prospect of such tough regulations migrating to other parts of the world not subject to the kind of climatic inversions that produce the smog, are being viewed with apprehension, not to say resentment, since there is a widespread feeling that they are unnecessary in Europe, or other parts of the world.

Leaving aside America and Japan, which are special cases, the motor industry tends to work to the highest standards of emission control so that vehicles that conform to them will be acceptable in all other markets. Where an engine is being modified, or a new engine being introduced, it is generally designed to meet the next highest level of controls still on the sidelines.

Emission control regulations are a comparatively new feature of life in the motor industry, and have involved individual companies in millions of pounds in establishing research and development facilities and test rigs for they represent a big leap forward from the time of the previous legislation dealing with the emission of sparks, grits and other substances from steam trains.

In addition to lead, or rather oxides of nitrogen commonly referred to as NOX, the other pollutants are hydro-carbons, or unburnt petrol, and carbon monoxide, the toxic gas resulting from incomplete combustion. The first emanation of control was the sealed crankcase in 1971. The next, and current one concerns only hydrocarbons and carbon monoxide, which was introduced in 1977. It is known in the trade as ECE 15.01. The Economic Commission for Europe works under the auspices of the United Nations and is trying to harmonise regulations in Europe and those with regulations world wide, though America and Japan have different ideas.

The UK is almost on the eve of introducing the next amendment, which tightens the emission level by 20 per cent. The amendment after that, in the early '80s, will introduce NOX emission levels for the first time and the amendment following will tighten all three by a further 15-20 per cent. Under the rules of this European "club," on which sit representatives of the Transport Department, any two governments can sponsor legislation via the UN Secretariat, and all other governments are encouraged to agree the regulation so that all vehicles certified to that regulation are acceptable in their countries. However, for sovreignty reasons the process is quite optional, and indeed the UK has refused to accept *a number of regulations*—on noise because we had a stricter level; on seat belts because it was thought we had better domestic standards. On the other hand the UK was among the first to adopt crash barrier regulations, and accept regulations when they come up to domestic standards. While NOX emission levels have still to be introduced there is a Common Market directive that from 1981 they must not exceed 0.4 grammes of lead per litre of petrol or be less than 0.15 grammes, the current German level.

Commercial vehicles are also subject to emission controls, but here they apply for the time being only to visible smoke. Again it is interesting to see the empirical way in which the legislation is being built up. "What levels of visible smoke are acceptable?" is rather like asking "What levels of exhaust pollution (which is invisible but none the less potent) are acceptable?" The relevant British Standard was set after a long series of observer tests at the Motor Industry Research Association's establishment near Nuneaton. Various levels were agreed according to the ratio of acceptance. These are 25 per cent at the lower end, 50 per cent and 75 per cent at the higher end. The existing level is 50 per cent, although there is talk of moving up to the 75 per cent level. While the levels of permitted emission are arrived at subjectively, measurement is obtained by shining a light into a box of smoke and reading off what are called the Hartridge units. These controls are supported by Common Market directives and regulations so that they move in step, and were arrived at by presenting the observer findings in mathematical form, analysing them and comparing with the level of light obscuration of the smoke. While there are a number of different methods of measurement, the Bosch light meter for instance, there is correlation between them.

European legislation does not include NOX, and there is no anticipation that it will move so far down the road the Americans have taken, although research is going on in the UK on a collective basis between engine and injection equipment makers, vehicle producers and the Government. *It is strongly* argued that if the U.S. Environmental Protection Agency standards had to be met it would penalise the rest of world markets, since the engines would be bound to cost more. In any case, there is no clinical evidence that diesel engine emissions are harmful; it has just been tagged with an unpleasant reputation because of smoke emission. *More information* on diesel emissions will become available when the sophisticated research now going on into measuring fuel particles and air flow behaviour with the help of lasers is completed.

Tightening

But while control of exhaust emissions are tightening, there is another body of opinion suggesting that on energy conservation grounds there ought to be wider cuts of vehicle fuels. In overall energy terms the maximum is needed from a barrel of oil having subtracted the energy needed to get it in the first place. Loosening the present tightly controlled specification for some fuels would help to achieve this, though inevitably it would pose problems for the engine designers and makers. They could not be certain, for instance, that consistent specifications would be held the world over.

The various options opening up are leading to investigation of various types of alternative power units to the petrol engine, which is notoriously inefficient under part load (unlike the diesel which does not have this problem). One of these is stratified charge engines, which are good on emissions but poor on consumption. The next decade will be one of intensifying activity to find acceptable solution to sometimes conflicting problems.

Peter Cartwright

Scope for electronics

THE ELECTRONIC age has already started in the car industry. But the big question now is how far it will go, and how quickly. No one quite knows the answer to this because of the state of what is still an infant technology. Much depends on the speed of *development in micro-circuitry* over the next few years and the ability of the electronics industry to reduce costs. As costs come down, the motor manufacturers will be more and more attracted to these new mechanisms, but this is a critical factor in an industry where expenditure on components has to be controlled extremely tightly.

The main scope for the use of electronics, however, is already clear. Electronics can be applied in various areas of engine control and fuel management, in anti-skid devices which control the braking mechanism, and in peripheral areas such as speed control. They can also be used to give more precise and detailed dashboard information in a digital form, and to sense and relay messages from roadside information outside the car. Electronic systems, indeed, have opened up the futuristic prospect of vehicles controlled entirely from outside, and although this is an unlikely prospect for many years to come, scientists have mulled over the possibility of cars in which all the driver does is to *give instructions on where he* wants to go.

At present, however, the main developments have been in the fields of ignition and fuel injection. Already, the ignition function on most cars in the U.S., for example, has been converted to electronic methods with a technique known generally as Breakerless Transistorised Coil Ignition. This means that electrical components are used to control the current which causes ignition, switching it between plugs and triggering it off electronically. The technique gets rid of the mechanical breaker points which both switch the current and perform the triggering mechanism in conventional cars, and which are notoriously subject to mechanical wear.

Timing

The advantages of the transistorised method is that it gives higher voltages and produces greater consistence in the ignition timing, both critical factors in a period in which leaner fuel mixtures are being used in the effort to conserve energy.

In addition, this technology is reckoned to be more economical on fuel. The disadvantage remains cost. As yet, these transistorised components cost more than the mechanical equipment they are aimed at replacing, and are only widely used in the U.S. where there is a high premium on any methods which will reduce fuel consumption and help manufacturers to meet the stringent Government guidelines on vehicle economy.

In Europe, it is estimated that about 15 per cent of the new vehicle fleet is coming onto the market featuring these components: all the new Chrysler cars, for example, use electronic ignition, and the new Citroen Visa, launched at the Paris Motor Show this year will also have it.

Analysis

A refinement of the transistorised coil is the completely computerised ignition system. This process is designed to calibrate computers to make an instantaneous analysis of what is going on in the engine and on the basis of this calculate the timing of the ignition to optimise performance. The techniques exist for measuring engine speeds, heat and so on, and this can then be translated into controlling the engine so as to improve fuel consumption *and emissions.* Some production of small series micro-computers has already started at General Motors and Chrysler to perform these tasks.

Electronics are also being widely used now in fuel injection systems. Interest in this area has developed because of the advantages of using injection, as opposed to the normal carburation methods, to achieve *cleaner fuel burns* and to improve fuel consumption. Electronics can be applied to the injection mechanism to measure air flows and decide when fuel should be delivered to the intake ports. In America, in particular, these methods are catching on because of the tight controls on exhaust emissions.

Further developments of this technology are devices which test the exhaust emissions and then feed the information back to the electronic control system so that the injection process is adjusted accordingly. Bosch, for example, the West German electrical company, has developed a piece of equipment called Lambda sensor which works by sensing the residual oxygen in the exhaust system. Information is then relayed *back to the controls to regulate* the air/fuel mixture.

Some engineers believe that these so-called engine management techniques may eventually lead to an almost complete control of mechanical functions, including the gearbox. This would involve not only activating the ignition and calibrating the fuel injection, but choosing the right gear at any particular moment. Under these systems, which are *now being developed* by gearbox manufacturers, electronics would be used to translate the driver's instructions on what speed he wants to go into the appropriate amount of fuel to be injected, the correct ignition timing, and the relevant gear.

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Tyre manufacturers under pressure

TOO MANY tyres chasing too few buyers resulting in cut-throat competition in the marketplace and at best minimal profit for the manufacturer. That, in a nutshell, is the problem the tyre industry is facing, with little prospect for short-term improvement.

Factors responsible for this unhappy situation include:

- Ever-advancing technology which improves tyre performance and increases potential life;
- The record number of foreign car imports into Britain. In the main, these cars come in on tyres made in their country of origin. Consequently, demand of British-made original equipment tyres suffers;
- A flood of imported tyres, some from Eastern Europe but many from the mainland European factories of companies like Dunlop, Firestone and Goodyear, which has further depressed replacement market prices.

The most significant change in tyre manufacturing technology has been the abandonment of crossply construction in favour of radial ply. The radial ply tyre of today, with belts of steel wire reinforcing and stabilising the tread, gives about twice the mileage of a crossply tyre.

As original equipment for factory fitting to new cars, the crossply tyre is virtually extinct. It lingers on in the replacement market, selling to highly cost-conscious purchasers who run old cars and care little what make of tyre they fit so long as it is cheap as possible. The effect on overall tyre sales is obvious.

Replacement

In the period 1972-75, when the number of cars and light vans registered in the British Isles went up from 14.1m to 15.2m, the number of replacement tyres decreased by 3m units (from 22.4m to 19.4m).

The rate of decline has slowed since then, but this year's tyre replacement factor is expected to be 1.26 at best. The only development likely to halt the downward trend is stricter legislation on tyre safety. At present, it is legal to use a tyre in Britain if it has a minimum of 1mm pattern remaining across three-quarters of the width of the tread. The British tyre industry and trade has been urging the Government to adopt a stricter standard of 1mm pattern across the whole of the tread, to be followed by an increase in the minimum pattern depth to 1.5mm or, hopefully, 2mm.

No doubt mindful that any arbitrary increase in motoring costs is unlikely to endear it to the motoring voter, the Government has so far remained unimpressed by the tyre industry's argument. The latest trend in car tyre design can be seen on a number of the imported car makers' stands at the National Exhibition Centre. This is the increasing popularity of ultra low profile tyres, only 60 or 65 per cent as high as they are wide, in the interests of enhanced performance and appearance. At present two firms are leading the field—Pirelli and Michelin.

Pirelli's new supertyre for volume produced cars is the P6, known as the Plus One Concept. It is so called because it is used in conjunction with a wheel 1in larger in diameter than usual. This keeps the car at the same height above the road and avoids the need to alter gear ratios, headlamp and bumper heights.

The P6 improves handling, steering response and cornering performance significantly. Unlike earlier designs of very low profile tyre, it involves no sacrifice in ride comfort. In fact, its sophisticated design allows thinner materials to be used in its construction which makes it less, not more, liable to transmit rough road reaction to the car's occupants. Among car makers using P6, which is now being made by Pirelli factories in Britain and Germany as well as Italy, are Alfa Romeo, Audi, Fiat, Opel, Saab and Volvo. As supply improves, others will follow suit.

Michelin's supertyre is the TRX, so far taken up only by Ford in Europe and the U.S. and on a smaller scale by Peugeot and Fiat. Unlike the P6, TRX demands the use of a special wheel, sized in millimetres, not inches, with a different rim shape. Its advantages are similar to those of the P6, though it seems to require greater modification to the car's suspension if its full performance and comfort potential is to be realised.

Technology

TRX is at present being made only in France but it will be in production in the U.S.A. in the near future and perhaps in Britain within a year. The flow of tyre technology across the Atlantic has been almost entirely westwards in recent years as the European subsidiaries of the American companies have passed on their radial-making expertise. But an American idea that may take root in Europe is the low-rolling resistance radial tyre of special design, exemplified by the Goodyear Elliptic.

This and other fuel-saving tyres are designed to run at much higher inflation pressures, which reduce rolling resistance, while preserving normal comfort. Goodyear's Elliptical—its sidewalls are abnormally curved to preserve flexibility at high inflation pressure—originally required its own unique wheel. But Goodyear had rapidly to change their mind when the U.S. car makers objected to this unwanted complication. A compromise rim that fitted both the Michelin TRX, which is a performance, not an economy tyre, and the Goodyear Elliptic was evolved to solve the problem.

Having one special rim to fit two different non-standard tyres would appear to have commercial advantage to both Michelin (which is out to topple Goodyear from the world's number-one tyre-making spot) and Goodyear itself. But there can be no question that Pirelli's solution of using a larger size of standard rim is more elegant and economic.

Dunlop continues to plough a lonely furrow with the Denovo runflat, failsafe tyre, now over six years old. A simplified version was announced last week. It has a thick layer of gel on the inner crown which seals penetrations and lubricates the tyre's interior in the run-flat mode. The string of lubricant containers of the earlier Denovo have been eliminated, but a special two-piece wheel is still required.

All the tyre manufacturers have made runflat tyres. Only Dunlop has marketed one and their technology is well in advance of any rival's. The car makers would like eventually to eliminate the spare wheel and tyre. Whether they will turn to Denovo is still uncertain, though its safety and convenience are beyond doubt. Only BL Cars have made any real commitment to Denovo so far, though two Fiat models can be ordered on Denovo in Britain.

Truck tyre design is relatively static. The haulier is interested in high mileage, reliability and being able to extend the life of the tyre's casing by regrooving and remoulding.

In recent years there has been a modest trend towards using fat single tyres to replace twin-formation tyres, especially on the rear bogies of articulated tankers, where they save weight and improve operating economics.

True low profile tyres, only 70 per cent as high as they are wide, have been used on the Leyland National bus for some years and are expected to penetrate the truck market by the early 1980s. They allow the brakes to be bigger for a given overall tyre diameter, have higher load carrying capacity and improve vehicle stability and handling. But vehicle design will have to be changed to exploit the low profile truck tyre's advantages.

Radically new car or truck tyres, with no casing reinforcement and made by injection moulding instead of labour-intensive building methods, are still a very long way off. The industry wants to make real money out of its huge investment in costly radial ply tyre building equipment before it ventures into new technologies.

Stuart Marshall

The VW Passat LS Estate

Electronics

CONTINUED FROM PREVIOUS PAGE

Another application of electronics which is rapidly moving into the era of commercial application, is in skid control. These anti-skid devices mean linking the wheels by way of sensors with an electronic control unit which then interprets what is happening to the braking mechanism on each individual heel. The idea is to prevent any one of the wheels from locking and thus creating a skid. Rapidly alternating electronic signals from the central device control the brakes to prevent them locking any of the wheels. An anti-skid system of this kind, jointly developed by Bosch and BMW, will become an optional extra on the German car company's 7-series saloon by the end of this year: and Mercedes is also moving into this field.

Finally, electronics are moving into the instrumentation area, where they are being used to give far more information than was previously available to the driver. On some up-market vehicles this process has already started. The instrumentation includes devices to let the driver know the state of oil in the engine, whether the windscreen wiper system has water in it or whether the lighting system is working properly.

In the US, some electronics companies are now marketing bolt-on accessories which, for as little as £200, provide the driver with extra information such as the amount of petrol he has used on a particular journey, what his average speed has been and so on.

Cheaper

Almost all of these electronic devices are now known to work satisfactorily on a motor car. The basic problem facing their future use is cost—and that comes down to questions of developing the products so that they are cheaper to manufacture, technical improvements in microprocessing itself, and the application of mass production techniques which will make them suitable for the motor industry.

Partly because of these cost issues the possibility of joint development projects or even co-operative manufacturing enterprises are being investigated in these fields. In France, for example, Renault and Bendix, the U.S. manufacturer, have talked about a joint project, and Renault is also known to be talking to Bosch of Germany and Lucas of the UK. Similarly, the Peugeot acquisition of Chrysler Europe may also help the French company in this field, since Chrysler is one of the world leaders in electronic equipment, which it developed in one of its non-automotive divisions for the American space programme. Fiat has also said that it is interested in pooling research and development efforts with others.

The main companies involved at present are split fairly evenly on both sides of the Atlantic, including Lucas and Bosch in Europe, and Bendix and Motorola in the U.S. There is no doubt that all of them view the electronics field as an important part of their future development. Standard electrical systems, of course, still have some time to run. But if the pace of development in the past five years is a guide to the next decade, the electronics revolution will have fundamentally taken shape in the motor car by the end of the 1980s.

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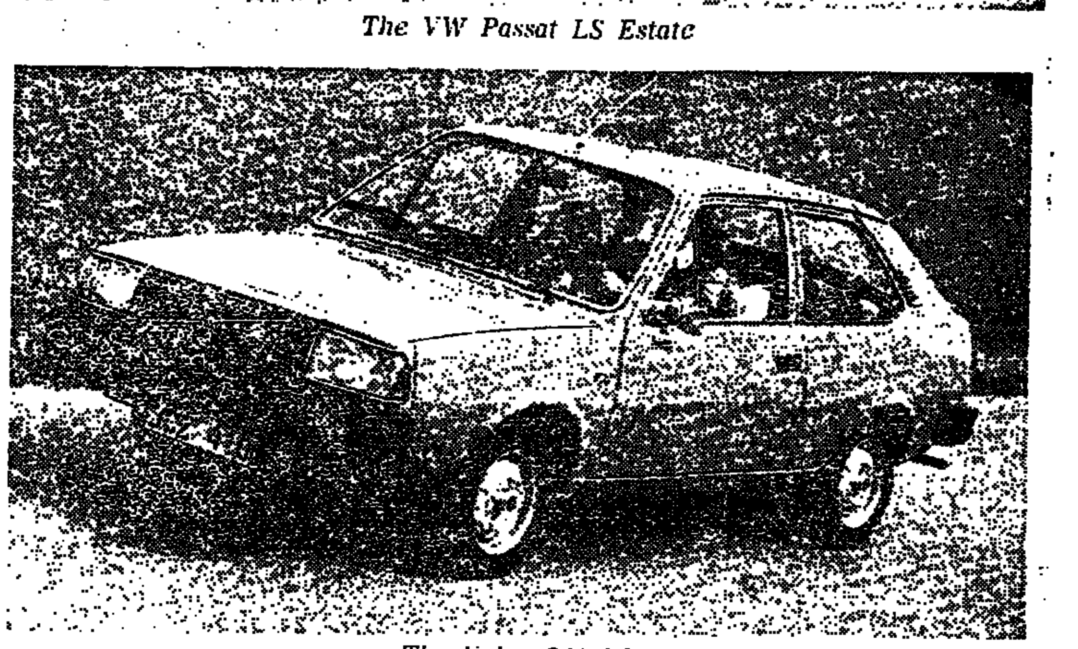


The Volvo 343 DL

Every large manufacturing country in Europe is now faced with an increasing percentage of car imports. Among the major motor producing nations of the free world, only Japan has kept imports to a negligible share of its home market.

Changes in trading patterns

THE IMPACT of the free trading policies which followed the Kennedy Round agreements and the creation of the EEC can be seen quite clearly in the development of the European car industry. Whereas 12 years ago every large manufacturing country was importing only between 5 and 15 per cent of its new cars, today this percentage has increased to between 20 and almost 50 per cent. A similar pattern has developed in the U.S. Among the big motor-producing countries of the free world, only Japan has successfully defended its own industry against imports.

Within Europe, these changes have been particularly severe in Britain. In 1965, just after the first rejection of the UK's efforts to enter the EEC, domestic manufacturers satisfied 95 per cent of local demand. But by last year, when tariff barriers against the EEC had been completely dismantled, British companies were only satisfying about 55 per cent of demand. This slump has occurred despite limitations on Japanese imports, which have probably held the Japanese share by at least 5 per cent, and despite the attempt to shore up the British industry with considerable tranches of public finance.

A similar change in the trading base has also occurred in Italy, although, in this case, it has not had the problem of sudden adaptation to the Common Market to contend with. The Italian manufacturers' share of their own market, traditionally dominated by Fiat, has fallen from 88.5 per cent in 1965 to 64 per cent, partly because of Fiat's decline from a near monopolistic position which it was unrealistic to expect to continue, and partly because of more aggressive efforts from the importers.

In West Germany and France, *the other two large car manufacturing zones in the EEC*, the trend towards imports has not been so marked, although it has been quite positive. The West German manufacturers' share of their home market has fallen from 88.8 per cent in 1965 to about 79 per cent, while France's has fallen from 85 per cent to 78.

Vigorous

The statistics also show unequivocally that Germany and France have been by far the strongest competitors in Europe during the past 12 years, with the French manufacturers experiencing the most vigorous growth of all. German producers, while finding expansion virtually impossible in the U.S. following the demise of the Volkswagen Beetle, have pushed into France, Italy and Britain; the French, with their attention *fixed mainly on Western* Europe, have pulled back the German lead in most of these markets and surpassed it in Italy, where they have almost 20 per cent of the market against 15 per cent by the Germans.

If the French stake in Spain is also taken into account, their relative improvement against the West Germans looks even more impressive. Whereas German producers have no significant investment in the Peninsula, two French producers, Renault and Citroen, already have plants there, and Peugeot will add to its capacity after its takeover of Chrysler Europe. The French share of Spanish sales could amount to about 500,000 units this year.

Equally, the figures show the acute decline which has gripped the British industry in the period. Last year, UK com*panies' sales in the main* EEC markets were insignificant, making nonsense of the industry's argument that entry to the Community would increase competitiveness and open up an entire new market. In fact, sales have actually fallen from what they were 12 years ago. In France they have dropped from 2.6 per cent of the market to 1.3 per cent, and in Italy from 1.2 per cent to 0.5 per cent; in Germany they have gone up slightly, but only from 0.3 per cent of the market to 0.6 per cent.

Outside Europe, the main change has occurred through the growth of the Japanese industry. This expansion, first led by Toyota and Nissan, the Datsun producer, but now being followed by the smaller Japanese producers as well, accounts almost entirely for the development of imports in the U.S. The Japanese share in the American market, which stood at an insignificant 0.2 per cent in 1965, against the German's 4.5 per cent, has now grown to 12.2 per cent. By contrast the Germans have slipped to 4.0 per cent, while the other European industries have stood still at less than 1 per cent each.

These market changes relate very closely to the way in which production in the world's motor industry has developed in the period. U.S. car output has stayed virtually static since 1965 at just over 9m units (10m including Canada): which Japan, with a development strategy based fundamentally on exports to the U.S., has lifted its output from about 700,000 units to a little under 5.5m. About 40 per cent of this output is now taken up by a much-expanded Japanese market, while the base for profitable exports is pro*vided by Japan's 1.2m registra*tions in the U.S. The rest is exported all around the world, with about 600,000 units going into the EEC.

In Europe, production expanded very quickly between 1965 and the peak year of 1973, when it approached 11.5m. Since then it has been forced into reverse by the oil crisis, only coming back to 1973 levels last year. The most significant feature of these changes is the way in which they have embraced a sharp switch in production resources away from the UK, and, to a lesser extent, Italy, while France has emerged to challenge West Germany as the region's premier car manufacturer.

German production has gone up during the period from about 2.7m units in 1965 to 3.8m last year. But the French have advanced from 1.4m to 3.1m. *Britain's output, by contrast,* has gone down from 1.7m cars to 1.3m, while Italy's, after a rapid expansion until the early 1970s has slipped back. Italy now produces about 1.4m cars compared with 1.1m in 1965 and almost 1.8m six years ago.

Capacity

The improvement in the West German position reflects to a certain extent on the American multinationals' policy of switching their car assembly capacity away from the UK and towards West Germany. Both German Ford and Opel, the General Motors' subsidiary, have developed considerably during this period, making up for the stagnation at Volkswagen which followed the demise of the Beetle model. In the UK these policies have had the effect of *aggravating* the decline in car assembly which has followed the unsuccessful scramble to rationalise the industry around a strong indigenous company based on the old Leyland and BMC companies.

During the same period the French manufacturers have grown under the strong encouragement of their Government. This expansion has been led by Renault, the State-owned group, which works closely with the Government and which has been encouraged to invest heavily and export vigorously. Established under State-ownership by General de Gaulle soon after the war, Renault first received a direct injection of State equity soon after the General's return to power in 1958. Since then its expansion has been rapid.

The other side of De Gaulle's policy was to fight against the development of the American *multinationals in Europe. This* received a blow when Chrysler took over Simca, but it now looks like being resolved in favour of a completely home-owned industry by PSA Peugeot-Citroen's bid for Chrysler's European interests. If this deal goes through it will create the largest car group in Europe—yet in the mid 1950s Peugeot was only about the size of Hillman in the UK and was effectively selling just one model.

Although detailed trade figures are not yet available for 1977, the statistics up to 1976 indicate quite clearly how rapidly France's export potential has grown. By contrast, Britain's has declined, while Western Germany's, after expanding until the crisis of 1973, has also stagnated. The Italian industry, under the determined effort by Fiat to gain an international position in the world's motor industry, has also increased its exports despite its production problems.

West Germany still leads the table, with exports in 1976 of almost 2m vehicles against France's 1.3m. But the German position embraces a fall since the total of 2.2m exports achieved in 1973, and may go down still further following the establishment of Volkswagen's plant in the U.S. earlier this year. Britain, meanwhile, reached its peak exports in 1969 with 721,000 units. Since then they have fallen to about 500,000 in 1976 against Italy's 700,000.

The development of trade in the motor industry over the next decade will depend to a certain extent on the kind of policies which emerge from the present efforts to expand the world economy and keep free-trading policies alive. But even if the present liberal policies are retained, most motor companies believe that there will be much less scope for expanding fully built-up vehicles in future than there has been since the last war.

This is partly because most developing countries are determined to build their own motor industries, and partly because it is economically more sensible to export technology and know-how over long distance than cars. In addition many companies are now trying to insulate themselves against violent swings in the currency markets by establishing overseas manufacturing bases: this is what has led Volkswagen to set up its new factory in Pennsylvania following a period in which it could not make money in the U.S. because of the rise in the Deutschemark relative to the dollar. The German company is now expected to be followed by the Japanese, who are faced with a similar predicament as the yen rises on the foreign exchange markets. Thus the development of a new group of multinationals is likely to be the most significant change in the industry over the next *decade*.

T.D.

CAR EXPORTS OF PRINCIPAL EXPORTING NATIONS

Year ended December	UK	France	West Germany	Italy	Sweden	Japan	Canada	U.S.
1953	307,368	81,339	140,935	30,155	1,411	—	27,977	[illegible]
1954	372,029	100,983	244,126	40,758	2,365	1	7,321	[illegible]
1955	388,564	132,859	357,380	69,397	3,040	2	11,833	[illegible]
1956	335,397	151,436	421,379	78,398	7,671	46	14,122	[illegible]
1957	424,320	218,565	515,882	110,953	18,812	497	16,244	[illegible]
1958	484,034	320,141	648,332	161,130	31,636	2,357	13,400	[illegible]
1959	568,971	514,755	737,861	216,881	43,848	4,884	9,761	[illegible]
1960	569,889	491,978	841,033	197,935	49,131	7,013	17,184	[illegible]
1961	370,744	369,147	878,160	234,893	45,596	11,531	9,495	[illegible]
1962	544,924	469,897	975,650	305,429	53,835	16,011	11,874	[illegible]
1963	615,827	522,613	1,217,269	291,877	63,192	31,445	15,514	[illegible]
1964	679,383	441,949	1,356,929	313,097	73,125	66,965	38,277	[illegible]
1965	627,567	487,171	1,434,241	307,534	84,186	100,703	46,187	[illegible]
1966	556,044	501,024	1,475,547	371,632	104,692	153,090	42,755	[illegible]
1967	502,596	546,980	1,350,817	404,401	123,020	223,491	31,429	[illegible]
1968	676,571	628,586	1,801,563	557,695	138,767	406,250	49,015	[illegible]
1969	771,634	787,464	1,875,114	594,590	141,775	560,431	38,414	[illegible]
1970	690,339	1,061,306	1,934,475	632,128	186,537	725,586	36,487	[illegible]
1971	721,094	1,148,625	2,155,943	640,193	212,487	1,299,351	27,356	[illegible]
1972	627,479	1,240,028	2,097,636	659,112	195,247	1,407,340	40,935	[illegible]
1973	598,816	1,340,007	2,203,649	656,286	183,155	1,450,884	18,104	[illegible]
1974	564,790	1,297,565	1,882,279	686,244	163,294	1,727,396	30,764	[illegible]
1975	516,219	1,233,451	1,499,949	661,310	163,442	1,827,286	48,729	[illegible]
1976	495,796	1,326,845	1,995,408	696,409	143,191	2,539,117	64,814	[illegible]

Source: SMMT.

The British motor industry has still to overcome its labour relations problems. In addition to major strikes' production is constantly affected by numerous minor stoppages.

Labour troubles continue

INDUSTRIAL relations remains one of the most fundamental issues challenging the motor industry: the old complaint about no model range being any use if delivery cannot be guaranteed on time is as true today as ever before.

Major disputes immediately become major news. But continuity of production and output targets are equally affected by numerous minor stoppages of which little is heard outside the plant directly involved.

The autumn began with two of the big four UK car manufacturers—Ford and Vauxhall—among the first companies to face pay negotiations since the introduction of the Government's 5 per cent guidelines. Vauxhall unions rejected a pay offer in line with guidelines but agreed to continue talking to the company. Rejection of a 5 per cent offer by the Ford workers led to immediate walkouts which brought all the company's 23 plants to a standstill.

Deadlock in the Ford strike was broken when the company, following rejection of the 5 per cent guidelines at the Labour Party conference, agreed to reopen negotiations in a spirit of responsible free collective bargaining—a move likely to have far-reaching repercussions for pay policy. Despite the return to free collective bargaining in negotiations, however, the Ford unions still faced a hard fight in trying to persuade the company to come anywhere near their claim for £20 per week increases and a range of other improvements.

An aspect of the claim on which the unions were particularly hoping to make ground was a demand for a reduction in the working week. This was rejected forcefully by the company in its initial reply.

Ford says that a means must be found of getting its British plants "up to the European level of performance" rather than introduce measures which it believes would lead to them lagging further behind.

Comparisons between the productivity records of the British Ford factories and those in Germany, France, Belgium and Spain are frequently raised in negotiations between the company and its unions. Many of the productivity comparisons show the British plants to come a very poor second, although shop stewards have complained that these fail to take sufficient account of the age of much capital equipment in British factories, particularly at Dagenham, Ford's biggest British plant.

Complaints

In a recent trade union study the Ford shop stewards claimed that complaints about productivity should also be set against comparative labour costs. According to the union figures total labour cost of a British-*built Fiesta was $374 of which* the British input was $215. In comparison, said the unions, the labour cost of a German Fiesta was $488 of which the German element cost $370.

Comparisons with Europe can also be expected to arise now that approval has been given by the British Government for the Peugeot-Citroen takeover of Chrysler's operations in Britain, France and Spain. British unions put strong pressure on the Government to secure the tightest possible guarantees from the French company on the future of UK operations and Peugeot-Citroen has undertaken to sign a new planning agreement and has given assurances on the continuation of the British new model programme.

Peugeot-Citroen has said that it does not at present envisage plant closures or redundancies in Chrysler UK, but the unions will be seeking more detailed talks on the company's future intentions now that the takeover has been approved.

The French company will be inheriting in Britain a very different industrial relations structure to the one which has developed in its French factories, where company unionism is strong. Union leaders are determined to develop an organisation across national boundaries to try to influence the activities of the new multinational company and a series of international meetings are being arranged.

The competitive implications of the Peugeot-Citroen take*over of Chrysler UK is leading* some British union leaders to the view that there will have to be collaboration between BL and a European motor manufacturer. A research report produced by the leading motor unions concluded last month that Leyland was too small for the international league and that closer contacts with a European manufacturer would be the best way of giving it the size and capability to compete effectively in world markets.

Labour relations in Leyland continue to be dominated by the unrest among toolroom members of the Amalgamated Union of Engineering Workers who last year staged one of the most serious strikes which the company has ever had to face.

The toolmakers are continuing to demand separate negotiating rights—something which neither the company nor their union is any more prepared to concede now than at the time of last year's strike—and action on pay differentials.

After many months of warnings from the toolmakers' unofficial leaders that another dispute might be called the problem exploded around a strike by 32 toolroom workers at BL's SU Fuel Systems factory in Birmingham. After defying repeated calls to appear before the AUEW's East Birmingham district committee and explain why they were disobeying an instruction to return to work the committee decided to expel the toolmakers—leading to a decision by the unofficial toolroom committee to call another all-out strike when the expulsions took effect.

Showdown

The expulsions were later withdrawn—avoiding, at least temporarily, a showdown between AUEW leaders and the unofficial committee. However, Mr. John Boyd, general secretary of the AUEW, has since warned that members who refused to accept the discipline of the union must be penalised. This applied not only to the 32 strikers, said Mr. Boyd, but to the "small nucleus of self-appointed bureaucrats" who were threatening to call other members out on strike. The TUC must insist, he added, that no other union took into membership any AUEW members who deserved to be expelled.

These harsh words suggest that the power battle between AUEW leaders *and the rebel* toolroom workers is not over yet. Leyland could once again become the focus of a dispute over union power which could have an overwhelming effect on the company.

Both the company and the union hope that the issue will eventually be resolved by moves towards pay parity which are due for completion by November, 1979. This would give a common pay rate in all the toolrooms and put the toolmakers and other highly skilled workers at the top of a new company-wide graded structure. AUEW leaders have told the SU strikers that they would be prepared to try to bring forward the implementation date if there is a return to work and if productivity justifies it.

In the meantime BL, which will be expected to keep within Government pay guidelines, faces the same pressure as Ford on the wage front. The BL Cars unofficial shop stewards combine is pressing to create the "£100 per week production worker," an ambition which would mean increases of up to £27 per week at some plants.

Alan Pike

Kaunda in a cleft stick

By MICHAEL HOLMAN, Lusaka Correspondent

Kenneth Kaunda

PRESIDENT Kaunda of Zambia made the most painful decision of his political career when he agreed to fall back on the railway link through Rhodesia and to South Africa for handling exports of copper and imports of fertiliser. Of the landlocked country's two other railway links, the Benguela line through Zaire is cut, and the Tazara link to Tanzania is not in condition to handle Zambia's full needs.

The Government-owned Zambia Daily Mail explained Mr. Kaunda's reasons in these bitter words: "The politics involved in the decision to open the southern route . . . (are) . . . the politics of survival brought about by the fact that all the people we counted upon as allies have decided to abandon us." The comment reflects both bitterness and the acknowledgment of a dire economic crisis.

Senior officials argue that the duplicity of the West has contributed to their country's plight. They cite the Bingham Report on deliveries of oil to Rhodesia, or the fact that the U.S. imported Rhodesian chrome until 1977. These and other acts or omissions have extended the life of the Salisbury Administration, they say, while the cost to Zambia of sanctions and re-routing over the past five years exceeds £640m.

Dr. Kaunda's *volte face* could cause him difficulties at the forthcoming Presidential and general elections on December 12.

As it is, there are doubts in some quarters whether he acted in time. Zambia's internal transport infrastructure is poor. There is a shortage of lorries, and roads are bad in rural areas. The railways need more locomotives, wagons and spare parts. Some 1.5m bags of last year's maize crop need to be collected by lorries which then must load at least 170,000 tonnes of fertiliser at railheads and deliver it to the farmers. This complex operation has to be concluded before the November rains if Zambia is to be able to feed its 5.6m people without outside help.

Informed sources in Lusaka maintain, in spite of government denials, that Zambia has been importing small amounts of coke from the Rhodesian mining centre of Wankie. However, the current exercise involves some 90,000 tonnes of fertiliser and about half of Zambia's 55,000 tonnes monthly of copper exports, traffic on that scale could not be concealed.

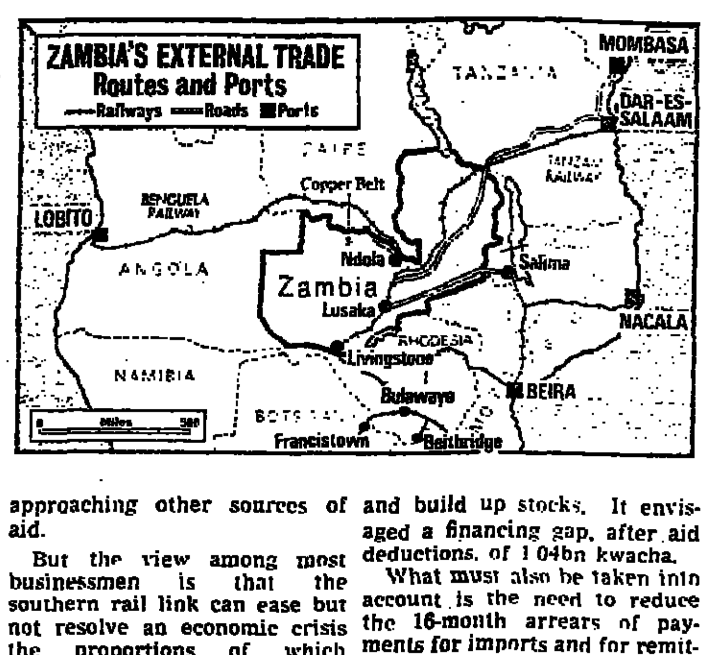
Most observers agree that even with the southern route open — and assuming that there is no rapid increase of the copper price — at least two tough years lie ahead.

In constant money values gross domestic product per head fell from kwacha 198 in 1976 to kwacha 185 last year (about £119 at present exchange rates), making it the lowest ever recorded, the Bank of Zambia said in its annual report for 1977.

Dr. Kaunda's decision to allow the Rhodesian premier, Mr. Ian Smith, to visit Lusaka twice in the past 13 months to hold apparently fruitless talks with Mr. Joshua Nkomo, co-leader of the Patriotic Front, has not brought a solution to the Rhodesian problem any closer. The visits strained relations between Dr. Kaunda and Presidents Nyerere of Tanzania and Machel of Mozambique.

Zambian officials say the re-opening of the southern link is permanent, and maintain that Mr. Smith extracted no *quid pro quo*. Many observers doubt the latter. Since the Rhodesian Prime Minister now controls Zambia's lifeline, to what extent will he tolerate guerrilla attacks across the Zambian border? Mr. Nkomo has said that the move poses "some difficulties." But, he said, "we are going to fight along the railway line. Nothing will pass there which we do not want to pass." Unless that was mere rhetoric, the southern route could still be in jeopardy.

The economic benefit to Zambia can be set against the possible political problems of re-opening the southern route. If all goes well and the fertilisers come, it will avert a disastrous failure of the maize crop. Receipts from the 100,000 tonnes of copper combined with regular future shipments will ease the acute foreign exchange shortage. The mines will be able to import lubricating oils, equipment and spares. Above all, it should mean that the Government can keep to the programme agreed with the International Monetary Fund (IMF) in March in return for the offer of loans totalling $390m. That in turn will stand Zambia in good stead when approaching other sources of aid.



But the view among most businessmen is that the southern rail link can ease but not resolve an economic crisis the proportions of which emerged at a World Bank consultative meeting, held in Paris last June. A World Bank analysis of the problem, which included two scenarios of Zambian financing needs until 1980, was presented to delegates from the 20 countries and organisations attending.

The paper took into account a drastic reduction of imports which in real terms are only half of those in 1975.

The first scenario assumed that in real terms imports would remain constant. Shortages of essential imports would continue and GDP would fall. The current account deficit in 1978-1980 would be 560m kwacha, reduced to 360m kwacha after deducting external aid at present available. The second scenario, similar to one put forward by the Zambian Government, assumed sufficient expansion of imports to allow industry to resume normal production and build up stocks. It envisaged a financing gap, after aid deductions, of 1.04bn kwacha.

What must also be taken into account is the need to reduce the 16-month arrears of payments for imports and for remittances of profits and dividends. The bank was working on the basis of the March figure of 480m kwacha, and arrears remain at approximately this level. In addition, foreign exchange reserves, at present negligible, should be built up to cover three months' imports. That pushes total foreign exchange needs over 1978-80 to 1bn kwacha under the first and 1.8bn kwacha under the second scenario.

Zambia's debt service ratio has been steadily increasing. At the end of 1977 the external public and publicly guaranteed debt (disbursed loans only) with a maturity of longer than one year amounted to $1.3bn. The cost of servicing it was equivalent to 19 per cent of the year's exports, whereas in the late 1960s the service ratio had been 2 per cent. Zambia's capacity to service its debts in the years ahead will depend on maintaining the regularity of its shipments of copper for export.

In terms of internal politics, the border decision will be a major issue during the presidential and parliamentary campaign. Under the constitution only one man may stand for president. He must be nominated by the United National Independence Party (UNIP) at its general conference. In July the former Vice President, Mr. Simon Kapwepwe, Mr. Harry Nkumbula, once leader of the defunct African National Congress, and a little-known businessman, Mr. Robert Chiluwe, announced that they would challenge Dr. Kaunda for the nomination.

Mr. Kapwepwe, a member of the powerful Bemba tribe, was seen as the main challenger, from a platform of economic pragmatism which included a call for the reopening of the Rhodesian border and immediate denationalisation of certain state-owned industries. Mr. Kapwepwe in 1971 broke with President Kaunda and formed the United Progressive Party (UPP). It was banned in 1972 and Mr. Kapwepwe and other senior officials were detained for several months. Last September he rejoined UNIP in what now appears to have been an attempt to challenge Dr. Kaunda from within the only legal party.

Last month the UNIP general council, meeting to nominate a presidential candidate, passed a constitutional amendment requiring candidates to have been members of the party for five years, thus excluding Mr. Kapwepwe. The legality of the amendment is currently being tested.

Some observers suggest that Dr. Kaunda's decision to reopen the southern route will boost his popularity particularly if it brings more goods in the shops by the election. Others believe that the electorate, resenting years of shortages, will see it as a vindication of Mr. Kapwepwe. Should the new parliament reflect the latter view, a clash between parliament and President Kaunda, supported by the UNIP central committee, is conceivable.

The electorate could also vent its feelings in the presidential poll. Dr. Kaunda has to win 51 per cent of the votes cast, and although he is backed by the party machinery and the media, there will almost certainly be a Vote No campaign.

Evidence of a military build-up in this front-line state coincides with these events. In spite of denials by President Kaunda and Mr. Nkomo, western diplomatic sources continue to claim that about 75 Cuban military advisers are in ZAPU's Zambian camps. Russian arms shipments for ZAPU are arriving regularly at Lusaka Airport, and Mr. Nkomo's army of some 16,000 men — half of whom are based in Zambia—receives recruits from Rhodesia every day.

The 14,300-strong Zambian armed forces, lacking the commando and counter-insurgency capacity of the Rhodesians, are reduced to providing what protection they can to ZAPU camps, and to futile exchanges of fire across the Zambesi.

A conventional response to the frequent Rhodesian incursions — such as air attacks on towns and installations—has been ruled out, partly because Zambia, while prepared to provide what it calls "a reliable rear base" for ZAPU, is not prepared to fight Mr. Nkomo's war for him. Furthermore, the inevitable Rhodesian retaliation would "internationalise" the war, something the Zambians believe Mr. Smith would welcome.

Simon Kapwepwe

The possible shifts in Zambian politics in the months ahead are difficult to forecast. The pragmatic approach of Mr. Kapwepwe wins the support of most of the business community and undoubtedly many Zambians believe that the economic depression could have been reduced by timely and appropriate decisions. But there is also a powerful group in the UNIP central committee — the country's decision-making body — which wants to shift Left and to closer associations with the Socialist bloc. One policy implies a live-and-let-live attitude to Rhodesia and South Africa. The other carries the prospect of a major conflict across the Zambesi. What lies ahead is the likelihood that the continuing economic problems, the main reason for strain within the one-party system, will test the President's considerable political skills, and Zambia's reputation for tolerance and stability.

Letters to the Editor

Nuclear power

From Mr. G. Hockley

Sir,—Professor Grant (October 12) quotes the estimates of the Health and Safety Committee to support his contention that nuclear power is safer than other power sources. These estimates have been criticised by outsiders as well as being highly qualified by the committee itself. They exclude any effect of severe rare accidents; the one-in-a-million chance Professor Grant originally asked us to consider. Survivors of such an accident may be consoled by the committee's statement that "the probability of these events is so small that they would have no significant effect on the long-term averages." Risk estimates for nuclear power generation and reprocessing are based on accidental deaths of employees during 1970-77 as reported by British Nuclear Fuels. Some of the sharpest criticism was made by the Flowers Sixth Royal Commission Report on Environmental Pollution in 1976 about the monitoring of health effects and statistical evidence (paragraph 74), and as a result this statistical evidence was not considered by the Windscale Enquiry (paragraph 10.47). Figures for deaths in nuclear power are biased downward for two reasons. Employees who died after leaving the nuclear industry are excluded, and some of the effects on workers past and present will not yet be apparent. The first point alone is sufficient to make these figures meaningless.

Mr. Vey, director of information services of the UK Atomic Energy Authority in the same issue continues to rely on these misleading safety figures. He also states there is no evidence of interference with civil liberties "nor is there any reason why it (nuclear power) should do so." The Flowers report paragraph 185/6 and the Windscale Inquiry chapter 7 give the lie to Mr. Vey's assertion. The apparent necessity of nuclear proponents to base their case on discredited statistics and arguments only serves to cast doubt on their case that a greater use of nuclear power will be safer than the alternatives.

G. C. Hockley
(Senior Lecturer in Economics),
University College, Cardiff.

Accountancy papers

From Mr. G. Ledeboer.

Sir, — Mr. Schaller's crie-de-coeur (October 13) regarding changes in examiner's thinking calls to mind the perhaps hoary joke about the undergraduate who couldn't understand why the economics paper set the same questions each year. The reply came: "The questions may be the same, but the answers are always different."

G. P. Ledeboer.
"Pinewood," Framewood Road, Fulmer, Buckinghamshire.

Examiners thoughts

From Mr. R. Goodrich.

Sir,—One never ceases to read complaints about the problems of passing the examinations of the Institute of Chartered Accountants in England and Wales, and these tend to concentrate on the difficulty of predicting what the examiners are thinking. I suspect that their efforts take into account the need to establish whether the candidate can do more than reproduce what some accountancy school has anticipated.

The Institute of Chartered Accountants of Scotland supervises the training of its own students, and consequently there is a closer understanding between the teachers and the examiners. It might be argued that this makes anticipation of the questions easier, but I believe that the best exam. questions could be set again and again without any great disparity in relative performance. I have frequently heard argument that the English qualification is as good as the Scots, but never the converse. If nothing else, this must indicate that the Scottish qualification is not significantly inferior.

You do not have to be domiciled, resident, nor ordinarily resident in Scotland to qualify as a chartered accountant.

R. M. Goodrich.
Goodrich Clark and Co.,
11, Hither Chantlers, Langton Green, Kent.

Transkei's land

From the Press and Publicity Officer, Transkei Information Office.

Sir,—On October 4, Mr. Quentin Peel described the proposed resettlement plans of the South African Government for squatters from the Crossroads camp to an area scheduled for consolidation into Transkei.

Paramount Chief K. D. Matanzima, the Prime Minister of Transkei, was never consulted about this disgraceful proposal. Building activities began in secret and the Prime Minister only learnt about it because the preparations were taking place less than two miles from his own farm.

Paramount Chief Matanzima sent a cable to the United Nations Commissioner for Refugees pointing out that this resettlement would involve separation of families and would create an artificial but tragic refugee problem by concentrating thousands of helpless dependants of urban Africans into an area which South Africa intends to hand over to a neighbouring country. Chief Matanzima demanded a meeting with Mr. Pik Botha, and this took place on October 5 when Chief Matanzima insisted that work on the township should stop and that the land be handed over to Transkei to be used for agriculture as it was originally designated. He made it quite clear that Transkei had no responsibility for the inhabitants of Crossroads, only a minority of whom are Xhosa-speaking.

On October 12, all traces of building works were removed from this area, and the South African Government confirmed that the land would be handed over to Transkei in June, 1979, as originally agreed.

Paramount Chief Matanzima's refusal to accept this proposal, and his actions in confronting the South African Government have thwarted attempts to put their separate development policy into practice on land which is to be consolidated into Transkei, a country which rigidly opposes apartheid.

Shirley Blyth,
Transkei Information Office,
35, Dover Street, W1.

Index funds

From Dr. W. Scott

Sir,—Mr. D. C. Damant (October 12) paints a misleading picture for trustees of investment funds.

The index fund concept has been the subject of fashionable debate in academic circles in North America. It has achieved rather less appeal in practice. The United Kingdom investor should note that an index fund, by definition, always underperforms the index.

The index has no liquidity. An appropriating fund always has some effective liquidity. Although in theory the time-weighted return measurement should adjust for this, it seldom does in practice. The reason is that the measurement interval is too large (typically one month or one quarter). The index experiences no dealing cost. But for a UK investor someone has to pay the 2 per cent stamp duty. In the performance returns this 2 per cent is taken into account.

An index fund in its constant search to mirror the index structure deals regularly and in small amounts. In many cases it will pay stockbroking commission at the top end of the scale rather than deal in economic size. If it does not then it is not an index fund.

For the real world investor, there is a difference between the bid and the offer price in the market. An index suffers no such penalty.

Index funds are intrinsically anti-capitalist. A share index is an arithmetic device. It is an average. Some companies ascend, some descend and others disappear, in relation to their prosperity. An index makes no distinction between them. A professional investment manager does.

The market is only retrospectively efficient. All the information is available to make it more efficient. Not all the participants in the market equip themselves with as much information as is available.

Mr. Damant refers to the fact that in the period 1970-78 only the upper quartile of managers in the Bacon and Woodrow sample out-performed in the equity sector. Surely this is not a disappointment. It is a normal conclusion in any market.

Excellence by definition is above average. Trustees aim to select excellence when they select an investment manager.

(Dr.) Walter Grant Scott.
Ivory and Sime.
1, Charlotte Square, Edinburgh.

Energy savings at all costs

From Mr. J. Goodland

Sir,—Are not some officials and official spokesmen in danger of being carried away by this craze for energy saving at all costs and in all directions.

We have plenty of coal and electricity, both having low import content and limited export potential. Why industrial and commercial users of these fuels, in company with those on oil or gas, should be warned of "forceful" Government intervention should they fail to take "adequate" energy saving measures is difficult to understand. Why the warning should have been delivered by the deputy chairman of the National Enterprise Board (October 11) is also a mystery: can one assume that firms which fail to save energy are in some special need of NEB support? Indeed, it would be interesting to know how much Government money has gone into the installation of oil and gas appliances in publicly assisted industries or establishments. Switch all public buildings to coal and the war would be won!

Our huge stocks of industrial coal—distributed and at colliery sites—may well force the closure of collieries with marginal economics but with workable reserves, which could thus be lost for ever. That is the antithesis of energy conservation.

In the light of our coal reserves on shore and offshore (and present stocks) and spare electricity generating capacity (there's no need for nuclear) it is almost criminal that natural gas should be promoted so heavily—often in the very name of energy conservation!—while indigenous reserves are unlikely to outlast the useful lives of appliances now being installed, with current supplies being increasingly augmented by imports, at a much higher cost. The commercial future for substitute natural gas, as with nuclear energy, seems to recede from year to year.

Tax natural gas in the way that fuel and gas oil are taxed (the present 2.5p/gallon duty could also be increased as an overdue conservation measure to make up for the declining real cost), subsidise coal and coal burning appliances—now that would be the making of a sensible energy conservation policy with the chance of a major contribution from minerless coal and renewable sources in the next century.

Incidentally, your "Managing Energy" supplement on the 10th was excellent. I could only register one fault, in Kevin Done's "Fierce competition for suppliers." Domestic solid fuel has ousted iron and steel into third place among the Coal Board's markets, and is shouting out for more supplies. Why, of all fuels, only domestic coal should be in short supply is a question only Hobart House can answer. There is a long-founded suspicion in the coal distributive trade that we (yes, I'm a coal merchant as well as a conservationist) are being squeezed in a kind of loving strangulation.

Come on, Sir Derek, tell us that there is plenty of coal for industry and commerce to waste if they want that, and that your colliery managers will push a bit more good coal into the domestic market when the price goes up on November 1, where it will be put to very good use.

John Goodland.
Down House, Puleigh, Taunton, Somerset.

Timber framed insulation

From the Director, British Woodworking Federation.

Sir, — I read with interest the article in your energy supplement of October 10 concerning the growing use of insulation, but nowhere could I find any reference to the development of techniques of building which have insulation as an integral part of the structure itself. The greater part of the article appeared to be referring almost entirely to new claddings, etc. which would make traditional houses better able to cope with future adverse conditions.

One method to which reference is not made is the timber-framed house. This is now a well-proven and highly efficient method of building, used increasingly in this country. Its advantages are that it provides an easy method of construction which, by its very nature, is insulated to standards beyond that currently required by the building regulations. Once the building is erected there is no need to fill up cavity walls, put in additional cladding or any of the other methods advocated. The building is designed to conserve energy and does so most efficiently.

In the very cold 21st century the owners of timber-framed houses will look back in gratitude on the foresight of those who in the 1970s and early 1980s added significantly to the housing stock by building this type of construction.

D. G. Worthy.
82, New Cavendish Street, W1.

Today's Events

GENERAL

Prime Minister presides at full meeting of the Cabinet.

Ministers and union leaders meet to continue search for an understanding on pay policy this winter.

Second day of EEC Foreign Ministers' meeting in Luxembourg.

EEC working group on harmonising industrial truck standards starts emergency three-day session to consider French unilateral action.

Final day of Financial Times' conference in Rome on Outlook for Italy.

In Washington, U.S. General Services Agency auctions 300,000 ozs of gold.

London Chamber of Commerce conference on "What the U.S. Buyer Expects."

Icons from 17th to 19th centuries to be sold at Christies—thought to be first London sale of art treasures on behalf of Soviet Union since 1967.

Sir Robert Mark and Sir John McKay at "Threat of Crime to Industry" conference, Cafe Royal, W.1.

Institute of Management statement on its "Code for Non-Discrimination."

OFFICIAL STATISTICS

Central Statistical Office publishes September cyclical indicators for UK economy.

COMPANY RESULTS

Final dividends: William Boulton Group. Brooke Bond Liebig. Raine Engineering Industries. **Interim dividends:** Central and Sherwood. Erith and Co. Furness Withy and Co. Kode International. Manchester Liners. Marks and Spencer. Provident Life Association of London. Siemssen Hunter. Spirax Sarco Engineering. United Carriers. Westpool Investment Trust. Wettern Brothers. Wilmot Breedon (Holdings). Interim figures only: Viking Resources Trust.

COMPANY MEETINGS

Brasway, Penns Hall Hotel, Sutton Coldfield, 2.30. Brit. Elec. Traction, Connaught Rooms, Great Queen Street, W., 12.15. British Scrap Federation, Hilton Hotel, W., 10.30. Centrovincial Ests., 4-6, Savile Row, W., 3. Matthew Clark, Winchester House, 100, Old Broad Street, E.C., 12. Louis Newmark, 143, Great Portland Street, E.C., 12. Norton and Wright, Queens Hotel, Leeds, 12. Pifco, Winchester House, 100, Old Broad Street, E.C., 12. Regional Props., Mayfair Hotel, W., 12. Williamson Tea, Sir John Lyon House, 5, High Timber Street, E.C., 12.

COMPANY NEWS + COMMENT

BSG up 50% but warns on Ford strike

ON TURNOVER up by over £30m from £101.3m to £131.9m pre-tax profits of BSG International increased by £1.6m to £4.81m for the first half of 1978—a rise of 50 per cent. Profit for all of 1977 was a record £7.74m.

Mr. Harry Cressman, the chairman, says that the directors are confident the group has the organisation and management to continue its expansion both in the UK and abroad.

Indications for the second half are that BSG will continue the pattern of the first period and also that, as in previous years, the second half will be more profitable.

However, this situation is clouded by the Ford strike and, he says, it remains for the group to do its utmost to minimise the effects of this industrial dispute.

"The implications of the industrial dispute at Ford Motor Company make it impossible for us to forecast the effects upon the group," Mr. Cressman states. Included in the figures for the first half is a contribution from Britax Weathershields from February 1, 1978, but the figures do not include Britax Vega, formerly Vega Auto Holdings which was acquired in July 1978.

On July 11, 1978, the bulk of the group's stake in "W" Ribbons was sold and figures for the period from this source are not included this year—the comparative half's figures include profits of £210,000.

	Half year 1978 £000	1977 £000	Year 1977 £000
Turnover	[illegible]	101,300	[illegible]
Trading profit	[illegible]	[illegible]	[illegible]
Sh. of assoc. profit	—	210	[illegible]
Interest payable	[illegible]	[illegible]	[illegible]
Profit before tax	4,809	3,207	7,738
UK tax	297	[illegible]	[illegible]
Overseas tax	[illegible]	360	[illegible]
Net profit	[illegible]	2,514	[illegible]
Minorities	[illegible]	[illegible]	[illegible]
Extraord. debits	[illegible]	[illegible]	[illegible]
Attributable	3,590	2,004	5,293

* Comprises £[illegible]: Loss on disposal of associate £246; loss on sale of subsidiaries £49; less: profit on sale of a trade investment £151 and exchange gains not dealt with through reserves £[illegible]. † Credits.

Pre-tax figure was struck after lower interest of £1.69m against £2.12m and was subject to a tax charge, ED 19 adjusted, of £928,000 against £693,000 split as to UK £297,000 (£333,000) and overseas £631,000 (£360,000).

The net interim dividend payment per 10p share, 0.91616p (0.7p), is up by the maximum increase permitted for the year—last year's final was 1.4323p.

The directors state that it is their aim to improve the return to shareholders as profits warrant and that they have made an application to the Treasury to achieve this objective under the dividend cover relaxation rule.

Within the motor trade the group's leasing business is continuing its rapid expansion and Mr. Cressman, says that Welford Truck Bodies goes "from strength to strength."

Subsidiaries in the vehicle accessory and component division are continuing to expand their range of aftermarket products for cars and motor cycles, he says. And the expanding market is sunshine roofs in Europe and the U.S. gives the directors every confidence in the future development of Britax Weathershields.

However, the economic climate for products in the industrial fasteners and steel manufacturing sectors of the group has not moved ahead as directors had hoped, but fastener distribution is improving, the chairman says, and the expansion programme is continuing.

Steel fabrication companies continue to have a stable market and again increased their contribution. Rumbolds, after a poor year in 1977, is doing very well in aircraft seating, and the order book and prospects are excellent, Mr. Cressman states.

Also, Hostess Furniture has returned to profitability, and although demand has not yet fully recovered, the directors believe it will make its rightful contribution within the foreseeable future.

● comment

While BSG's manufacturing interests have overall performed well it has been the motor distribution side that has been the strong runner. Half time profits for the group are 50 per cent higher which compares well with other distributors; vehicle distribution now accounts for 53 per cent of profits against 45 per cent last year. Much of the growth here reflects the growing demand for leasing, which at 15 per cent of sales is treble the figure seen a couple of years ago. All being well BSG could now be heading for about £11m pre-tax but the strike at Fords is a worrying feature. Fords now account for about 20 per cent of BSG's business and stocks are running extremely low. Moreover, Vauxhalls (the Cavalier is now popular with fleet operators) are also in short supply. Clearly the supply of vehicles holds the key to the outcome for 1978 but what is lost this year will presumably be made up in the next with fleet operators merely delaying any changes. So while borrowings still remain relatively high—£18m against shareholder funds of £23m, excluding goodwill in the last balance sheet—a possible prospective p/e of 3.2 at 41½p (based on a first half tax charge) and a yield of 8.8 per cent does seem an over cautious rating.

INDEX TO COMPANY HIGHLIGHTS

W. Tyzack recovers in second half

FOLLOWING THE £107,428 drop to £117,790 at halfway, taxable profit at W. A. Tyzack and Co. more than doubled in the second half to leave the July 31, 1978, year result up from £433,405 to £541,274. Turnover was 27.3 per cent higher, directors say.

After tax of £284,448 (£230,914) net profit went ahead from £202,491 to £256,826. At halftime, directors said that while a more satisfactory half year was expected, the total profit would be well short of the 1976-77 figure.

The final dividend of 1.0506p net per 10p share takes the total from 1.274p to 1.4226p.

The group manufactures precision engineering components.

J. T. Parrish doubled at halftime

Following a depressed £52,000 for the 1977/78 year, the directors of J. T. Parrish, departmental store and property development concern, report taxable profits more than doubled to £76,000 for the 26 weeks to July 29, 1978 against £37,300. Turnover for the period was up from £1.61m to £1.8m.

The directors state that results to date indicate a satisfactory outcome for the full year.

Sime Darby auditors supported

Turquand, Youngs and Company, the auditors which the board of Sime Darby wants to sack, received limited support from Robert Fleming, the London merchant bank, yesterday.

One of Fleming's investment advisers, who looks after investment trusts holding over 800,000 Sime Darby shares, said that the reasons so far given by the Sime Darby board were not good enough. Sime has stated that it wants to take the audit to rival firm, Price Waterhouse, because of its superior international coverage. But Mr. Arthur Clark of Fleming said yesterday that the board would have to show that shareholders were suffering some harm from the use of Turquand. The auditors were employed by the shareholders not by the company officials, he said.

Mr. Clark will not make up his mind how to advise his clients until the Sime board officially gives its reasons for the sacking and the auditors send their reply. He emphasised that his views were not necessarily those of Robert Fleming as a whole and that the trusts he advised were free to reject his advice.

Meanwhile in Kuala Lumpur, Turquand intends to hold a press conference on Wednesday morning to repeat its objections to the lack of explanation for its dismissal.

Dorrington advances at six months

Pre-tax profits of Dorrington Investment Company advanced from £301,000 to £369,000 for the six months to September 30 1978 and the directors are optimistic that the second half figures should at least equal those achieved in the first.

Turnover split as to gross rents and property sales finished the half ahead at £313,000 (£259,000) and £2,384,000 (£2,200,000) respectively.

The interim dividend is stepped up to 1.65p (1.4p) net per 10p share—last year's final was 1.6894p from pre-tax profits of £627,000.

The market for residential property in London has been buoyant, the directors state, and competition for the acquisition of high quality blocks of residential property continues to be intense.

They have been able to compete effectively for new acquisitions and are satisfied that they have the resources to continue to do so.

Net profit came out at £177,000 against £144,000 after tax of £192,000 compared with £157,000 and the directors say that although tax has been calculated at 52 per cent, the actual liability may be reduced at the year end, as a result of stock relief.

MR. LESLIE MARLER

Mr. Leslie Marler, now 78, is resigning as chairman of Marler Estates. He has accepted an invitation from the Board to act as a consultant.

DIVIDENDS ANNOUNCED

		Current payment	Date of payment	Corresponding div.	Total for year	Total last year
Allied Plant	int.	0.4	Jan. 26	0.3	—	0.71
Brook St.	int.	1.31	Jan. 2	1.17	—	4.2
BSG Int'l.	int.	0.92	Jan. 2	0.7	—	2.13
Dorrington	int.	1.65	Nov. 30	1.4	—	3.09
Forward Technology		3.91	Nov. 30	2	6.91	2†
Senior Eng.	int.	0.65	Nov. 30	0.58	—	1.183
Steel Bros.	int.	2.75	Dec. 19	2.5	—	6.5
W. A. Tyzack		1.05	—	0.91	1.42	1.27
Wood & Sons	int.	0.67	Nov. 21	0.33	—	0.66

Dividends shown pence per share net except where otherwise stated.
* Equivalent after allowing for scrip issue. † On capital increased by rights and or acquisition issues. ‡ For 15 months. § Includes additional 0.0058p now payable.

Slight fall at Steel Bros.

A SMALL decline in pre-tax profits from £3.33m to £3.14m for the first half of 1978 is reported by Steel Brothers Holdings, international trader and manufacturer, and arises from the conversion of foreign earnings into sterling, particularly in the case of the Canadian dollar.

The directors say the full year profit is likely to show some reduction from the record £6.76m of 1977, as, in addition to exchange differences affecting overseas earnings, conditions generally in the Middle East have been less buoyant with the result that a smaller contribution is expected from this source.

However, subject to the effects of further changes in exchange rates from current levels, net profits, excluding extraordinary items, should show little change from last year's comparable figure of nearly £3m, they add.

Half-yearly profits attributable to ordinary holders were up slightly from £1.56m to £1.59m. The interim dividend is lifted to 2.75p (2.5p) net per 25p share, costing £302,233—last year's final was 4p.

	Six months 1978 £000	1977 £000	Year 1977 £000
Turnover	[illegible]	[illegible]	[illegible]
Profit before tax	3,140	3,332	6,755
UK tax	[illegible]	555	1,510
Overseas tax	773	912	1,850
Extraord. credits	[illegible]	794	1,157
To minorities	174	159	336
Preference divs.	23	25	51
Attributable to Ord.	1,594	1,557	4,070

† Debits.

● comment

Steel Brothers has been stopped in its tracks by unfavourable currency movements, and full year profits will show a downturn for the first time since 1975. With foreign earnings accounting for around 90 per cent of group profits it was inevitable that the company was going to be hit. But the first half results—profits 6 per cent lower—disappointed the market and the shares dropped 20p to 215p. A further worrying factor must be the less buoyant trading conditions in the Middle East (55 per cent of profits) where Steel has a food and catering interest. Generally, though, trading conditions were good and foreign earnings were higher in local currencies. The shares yield a prospective 5 per cent assuming a 10 per cent increase in the dividend. The high overseas exposure must mitigate against short-term growth if Sterling continues strong.

Midway rise for Allied Plant

ENTIRELY DUE to organic growth, pre-tax profits of Allied Plant Group more than doubled from £92,000 to £206,000, on turnover of £2.48m against £1.69m, for the first half of 1978.

Mr. Michael Heathcote, the chairman, says last November's reorganisation, including an increase in share capital, has laid the basis to expand existing activities.

"This internal expansion is gathering momentum and can be expected to have a favourable impact on results for the full year," he states.

In July, when reporting on profits of £242,000 (£226,000) for 1977, the chairman forecast a record year in 1978.

Mr. Heathcote now adds that the directors, with further growth in mind, are presently looking at propositions in areas allied to existing activities.

These include hire of fork lift trucks and plant for the construction industry, structural steel engineering, heating and ventilating, provision of portable accommodation and housebuilding and contracting.

The net interim dividend is stepped up from 0.3p to 0.4p per 10p share, costing £36,352 (£30,000), after waivers of £3,648—last year's final was 0.405p.

Mr. Eric and Mrs. Margery Hurst, the joint chairmen of Brook Street Bureau of Mayfair.

First half upsurge for Brook Street

IN THE first half of 1978, Brook Street Bureau of Mayfair more than doubled its profits, from £357,486 to £738,480, on turnover 40 per cent ahead at £8.95m.

And the current levels of trading continue to be buoyant. Mr. Eric Hurst, who is joint chairman with his wife Margery, says it looks like being a good year and the economic barometer is set fair. "We seem to be in for a fairly good run less there is some drastic downturn in the economy."

	1978 £	1977 £
Turnover	8,952,963	6,407,426
Profit before tax	738,480	357,486
Taxation	*387,224	198,735
Net profit	351,256	158,751
Exchange gains†	15,243	5,543
Available	366,499	153,488
Interim dividend	90,297	80,554

* UK corporation tax estimated using 53 per cent rate. Overseas tax accounts for 0.4 per cent of group charge. † Relate to assets of overseas subsidiaries (loss in 1977).

Brook Street is opening a new branch in Paris in January, and intends to open more in the U.S. (there are already four there). Over the next two years some £1m will be spent in the U.S.

The interim dividend is being raised from 1.178p to 1.31p net per 10p share, and this is more than justified by the rapid growth of both profits and profitability coupled with the significant reduction in the losses of the Australian subsidiaries—in the half year they were $12,000, against $120,000 a year ago.

To increase the share marketability the directors are proposing a one-for-two scrip issue.

In 1977, the group turned in a profit of £903,974, and paid a total dividend of 4.204p.

● comment

Employment agencies are enjoying boom trading conditions. Brook Street is the second agency in less than a week to report pre-tax profits more than doubled. The main factors appear to be unexpectedly high demand for temporary staff plus strong improvements in margins from higher throughput. The agencies cut back to weather the low level of general economic activity so the upsurge in demand has been met by existing capacity which is basically the story behind the better margins. The Australian operation is heading back towards the black after a £70,000 loss last year and is expected to break even for the year as a whole. Current trading is described as buoyant and a good result is anticipated. If the annual dividend is raised by 10 per cent the yield is 8.3 per cent at 85p, though the company is hinting at an above average increase.

NOVEMBER AGM AT WILLIAM JACKS

As the year end at William Jacks and Co. has been changed from June 30 to December 31 the report and accounts will be dealt with at an AGM in 1979, directors report. However, to comply with the Companies Act an AGM must be held in 1978, and has therefore been convened for November 8.

INTERIM REPORT

RUGBY CEMENT

First half year another record

The Directors of The Rugby Portland Cement Co. Ltd. announce that the unaudited Group results for the six months to the 30th June 1978 were as follows:—

	6 months to 30th June 1978 £'000	£'000	6 months to 30th June 1977 £'000	£'000	Year to 31st December 1977 £'000	£'000
Turnover						
United Kingdom		36,256		31,433		67,002
Overseas		11,275		10,480		20,835
		47,531		41,913		87,837
Trading Profit						
United Kingdom		4,060		3,128		8,264
Overseas		1,841		1,839		4,068
		5,901		4,967		12,332
Interest Received and Investment Income		802		1,641		2,784
Interest Paid		(426)		(747)		(1,294)
Profit before Taxation		6,277		5,861		13,822
Taxation						
United Kingdom	1,715		1,475		3,990	
Overseas	914		813		1,833	
		2,629		2,288		5,823
Profit after Taxation		3,648		3,573		7,999
Minority Interests		163		146		338
Profit attributable to the Shareholders		3,485		3,427		7,661

Taxation includes an equalisation charge calculated on the same basis as last year of £1,250,000 (1977 £1,640,000)

At the Annual General Meeting held on the 13th June 1978 it was stated that if the rate of Advance Corporation Tax was confirmed at less than 34/66ths, the Board's intention would be to increase correspondingly the dividends announced on the 17th April.

The dividends to be paid on the 29th October to shareholders on the register on the 7th July will, accordingly, be as follows:—

On the 25p Ordinary Shares:
Supplementary 1977 final dividend 0.027p a share costing £19,008
1978 interim dividend 1.865p a share costing £1,312,960
(1977: 1.671p a share costing £1,176,384)

On the 5p Participating (n/v) Shares:
Supplementary 1977 final dividend 0.028p a share costing £9,072
1978 special interim dividend 2.030p a share costing £657,720
1978 interim dividend 1.193p a share costing £386,532
(1977: 1.069p a share costing £346,356)

The interim dividends other than the special interim dividend with associated tax credits result in an increase of 10% over the corresponding 1977 dividends.

The dividends on the Participating (n/v) shares are the last to be paid on those shares; following the Scheme of Reorganisation there is now one class of Capital comprising 94,490,535 Ordinary Shares of 25p each.

As announced in April the Board intends, in the absence of unforeseen circumstances, to recommend a final dividend for 1978, payable in July 1979, at a level which produces an increase of just over 12% on the total gross Ordinary dividend rate for 1977.

The interim profit is the highest yet reported for a first half year. This was achieved despite the fall in net interest received which reflects the fall in interest rates and the expenditure on capital projects in progress. Additionally the delay, from March to June, in fully implementing an increase in the price of cement cost the Company about £750,000.

In the United Kingdom our cement sales tonnages were usefully higher; this trend has continued into the second half year.

Continued progress is being made with the Rochester extension and the Southam conversion.

Although Rom River showed some improvement over the first half of last year, conditions continue to be difficult in the reinforcement industry.

In Western Australia both Cockburn Cement and the Parmelia Hotel produced improved results, but the benefit to the Group was reduced by the decline in the Australian Dollar since the 30th June 1977. Good progress is being made with Cockburn's new lime plant; to complete the financing arrangements, Cockburn are raising A$14,000,000 by the issue of Debentures at various rates and maturities.

Boyd-Carpenter

Chairman

The Rugby Portland Cement Company Ltd. Crown House Rugby

CHRYSLER PLANS HIGH-PERFORMANCE SUNBEAM

BY JOHN GRIFFITHS

Motor rallying's spin-off market

ONE OF the few concrete examples of motor sport translating directly into sales is recalled by Sig. Daniele Audetto, competitions manager of Fiat. The Fiat team for the Singapore Airlines-sponsored London to Sydney rally in 1977 comprised three diesel-powered Mirafiori cars. They were entirely new to Singaporeans. But Singapore taxi-drivers were so taken with them that within a few weeks requests for 3,500 had arrived in Turin.

Competitions-based, high-performance versions of production line cars have established a niche for themselves in the British market, with sales this year expected to reach 30,000, worth some £135m. The latest company moving towards a stake in this market is Chrysler, which hopes to launch both in the UK and Europe a 2.2 litre Lotus-engined version of its Sunbeam hatchback.

The launch will take place in the months after this week's Motor Show, provided an engine supply agreement with Colin Chapman's Lotus organisation can be finalised.

In doing so Chrysler will be following in the footsteps of other major European manufacturers, notably Ford, Vauxhall, Fiat and Opel, which make big-engined, expensive versions of their mass-market small cars.

As with the other manufacturers, however, Chrysler's first reason for producing the car is not directly linked to sales at all; rather it is to give the Sunbeam legitimate entree into the top level of motor rallying, and the prospect of reaping a rich publicity harvest provided by the top event in the world calendar, Britain's own RAC Rally, plus the seven other World Rally Championship events in Europe.

But the rules of the sport's world governing body, the Federation Internationale de l'Automobile, state that cars competing in WRC events must have similar specifications to those which can be bought by the general public. Further, the FIA insists that at least 400 such cars must be sold.

This led to the introduction into the showrooms of cars which, at first, most of the manufacturers would have been content not to make at all: the Ford RS1800 (now discontinued), Opel's Kadett GT/E, the Fiat Mirafiori Rallye Abarth and Vauxhall's Chevette 2300 HS.

But with the Sunbeam, Chrysler is expected to go further than other manufacturers in incorporating the competition-based car into its model line-up and to give it a formal launch as the flagship of the Sunbeam range. Chrysler's competition manager, Mr. Des O'Dell, has been evaluating a roadgoing version during the past few months and it has recently been shown to some major dealers. The competition car, while not conforming to World Rally Championship regulations—and thus so far not eligible for WRC points—has already been in action this year, its best result being second place overall on the Mille Pistes rally in southern France in July.

Top left, Fiat's Mirafiori Abarth Rallye; top right, Vauxhall's Chevette 2300 HS, a cheaper version of which is being considered; bottom left, Ford's successful Escort RS 2000; bottom right, Chrysler's Sunbeam, which is the subject of talks with Lotus.

It will not, however, be seen on the RAC Rally, which starts from Birmingham late next month. While Chrysler has given up motor racing to concentrate on rallying, this year's appearances have formed only part of a development programme which next season should see Chrysler competing for outright WRC victories.

The roadgoing Sunbeam, like its immediate rivals, is certain to be pitched above the £5,000 mark, double the price of more standard versions. The Chevette sells for £5,300 and the Kadett for £5,100, while the 400 Abarth Rallyes that Fiat produced were snapped up in Italy, where motor sport is a national passion; at a price approaching £8,000.

But while production of these immediate relatives of the competition cars has been limited, less expensive but still very much performance-oriented versions have proliferated.

Fiat will aim at this market with its launch at the Birmingham Motor Show of the Mirafiori Sport—to be sold in Europe as the Mirafiori Racing—with a two-litre overhead camshaft engine and 112 mph capability at £4,394. Meanwhile, Ford has just revised its own competitor in this market, the two-litre Escort RS 2000, in favour of two versions, the Custom, with a raised interior specification to boost its image of sophistication at £4,400, and a cheaper version pitched just below the phychologically important £4,000 mark.

The RS 2000 has proved an unexpected success for Ford. Made at the Saarluis plant in Germany, it has far outsold original expectations, and production so far this year is close to the 5,000 mark.

British Leyland is represented in this market with its now ageing Triumph Dolomite Sprint. But with another, cheaper version of the 2.3 litre Chevette under consideration by Vauxhall, a similarly cheaper version of the 2-litre Opel recently introduced into the UK, Volkswagen's fuel-injected Golf Gti and Renault's own candidate, the Renault 5 Alpine—to be sold in Britain from early next year as the Gordini—the small "supercar" market is becoming highly competitive and starting to assume some importance to manufacturers.

Chrysler's expected debut in World Rally Championship events will mean that all of Britain's four volume manufacturers will be represented. BL's position is slightly different from the others, however, in that its vehicle is the V8-engined Triumph TR7 sports car. This fell victim to the Speke closure resulting in the cancellation of its planned launch on the U.S. market this summer.

But BL says that it managed to get 400 of the cars built between July and November, 1977 —well before both the Speke closure and its application to the FIA for competition "type approval" from April 1 this year.

Chrysler's move serves to illustrate the greatly increased emphasis that Europe's manufacturers have come to place on motor rallying as a promotional exercise. And it was dramatically reinforced at the recent Paris show, where the new, mid-engined and turbocharged Renault 5 Alpine was unveiled. With 200 bhp, the car was one of the main talking points of the show. It is to be type-approved for competition by the end of next year and is also clearly a potential contender for the world championship.

Not least of the manufacturers' reasons for their increased involvement is the considerable expansion of media coverage of the sport. This year for the first time the BBC has allocated Saturday afternoon programmes to all international events held in the UK. But rallying has also come to be regarded as the most effective way to boost the image of mass-market vehicles.

Despite this, all the manufacturers point out the near-impossibility of translating the investment they make in the sport into an assessment of its affect on sales (Fiat's outlay covering its rallying (Fiat and Lancia) and racing (Ferrari) programmes is variously estimated at betwen £2m and £4m annually). Mr. Alan Edis, director of product planning at BL's Jaguar Rover Triumph company, does not agree with a Continental catchphrase that "competition influences 80 per cent of private cars sales"—"but our own research does indicate a correlation. In particular, BL's reinvolvement of the past few years has served to lower the age profile of buyers who had been steadily moving into the older bracket."

Nevertheless a hitherto unpublished study undertaken by Ford some time ago does throw some light on how the man in the street has perceived motor sport in terms of what car he he decides to buy with his hard-earned cash.

A survey taken among 1,191 new car owners in Britain, Germany, the Benelux countries, France, Sweden and Switzerland showed almost one-half professed to be "very" or "fairly" interested in motor sport—the figure for Britain was 43 per cent. Seventy-three per cent of the sample considered that the average motorist derived "much" or "some" benefit from manufacturers' participation in rallying, and 63 per cent felt events involving production car-based racing produced similar benefits. In Britain, 76 per cent believed rallying was of benefit, against 68 per cent for racing.

To the question, which events were most beneficial to the average motorist, 39 per cent opted for rallying, 26 per cent for saloon car racing—and 12 per cent for grand prix and other types of racing. British motorists awarded rallying 35 per cent and saloon car racing 21 per cent. Eighty-eight per cent listed tyres as the single feature most improved—91 per cent in Britain—with roadholding (87 per cent overall, 88 per cent Britain), brakes (85/87), engine performance (84/87) and overall reliability (79/82) close behind.

A source of considerable satisfaction to Ford, no doubt, was that its own name was mentioned—by 61 per cent of the sample—as the manufacturer associated with motorsport. Twenty-six per cent named it as the most successful in motor sport, and 25 per cent as the company benefiting most from it.

Rugby Portland 7.1% higher

AFTER A halving of interest received and investment income, pre-tax profit of Rugby Portland Cement Company advanced 7.1 per cent from £5.86m to a record £6.28m in the first half of 1978.

Stemming mainly from UK activities, trading profit was 18.8 per cent higher at £5.9m, on a 13.4 per cent increase in turnover from £41.9m to £47.53m.

The directors explain that the fall in interest received reflects not only lower interest rates but also high capital expenditure. At the same time the delay between March and June in fully implementing the cement price increase cost the company about £750,000.

As known the net interim dividend per 25p share is lifted from 1.671p to 1.838p, and there is an additional 0.027p on account of 1977. The directors are forecasting a 12 per cent increase in the gross total for the year. Last year's net final was 1.809p from profits of 13.82m. The interim dividend, together with the supplementary payment, costs £1.31m (£1.18m).

Reporting the first half performance the directors say that in the UK cement sales tonnages were usefully higher: this trend has continued into the second half.

Continued progress is being made with the Rochester extension and the Southam conversion.

Although Rom River showed some improvement over the first half of last year, conditions continue to be difficult in the reinforcement industry.

In Western Australia both Cockburn Cement and the Parmelia Hotel produced improved results, but the benefit to the group was reduced by the decline in the Australian dollar since June 30, 1977. Good progress is being made with Cockburn's new lime plant; to complete the financing arrangements, Cockburn is raising A$14m by the issue of debentures at various rates and maturities.

	Six months 1978 £000	Six months 1977 £000	Year 1977 £000
Turnover	47,531	41,913	87,537
UK	36,256	31,433	67,002
Overseas	11,275	10,480	20,535
Trading profit	5,901	4,967	12,332
UK	4,060	3,129	8,264
Overseas	1,841	1,838	4,068
Int. and inv. inc.	502	1,441	2,784
Int. paid	426	747	1,294
Profit before tax	6,277	5,861	13,822
UK tax	1,715	1,475	3,900
Overseas tax	914	813	[illegible]
Profit after tax	3,648	3,573	7,990
Minority profits	163	146	335
Attributable	3,485	3,427	7,661

See Lex

Reasonable start for Dowding & Mills

THE FIRST two months of the curren year at Dowding and Mills have started reasonably well, Mr. K. H. Sharp, the chairman, tells members, and the directors are hopeful that this trend will continue for the remaining four months of the half year.

As reported on September 22, in line with their forecast of a record year, the directors announced pre-tax profits of £1.74m (£1.43m) for the year ended June 30, 1978 on turnover ahead to £11.37m (£9.5m). The dividend is stepped up to 1.2p (1.075p) per share.

The company has continued its policy in new buildings, plant and machinery which, as and when industrial activity improves, the chairman says will enable Dowding to increase its own production still further. Some £919,729 was spent during the year—half on new buildings and half on new plant, machinery and vehicles.

Of the new projects in hand, work on the new factory at Falkirk is well under way and, when completed early next year, will place the company in a good position to increase its share of the market in Scotland, Mr. Sharp says.

The Sheffield extension is now finished and is in operation and is well placed to draw in more work from the industrial areas of the north.

The extension to the Birmingham factory is nearing completion and should be in production by the end of the year. As well as these projects Dowding has opened a small new branch at Ipswich to serve the expanding industries in East Anglia. "This is a Green field project and it has already built up a substantial list of customers," the chairman adds.

The auditors say that the valuation of work in progress excludes appropriate overheads and are thus not in accordance with SSAP 9. They add, however, that this exclusion does not significantly affect the accounts.

A CCA statement, based on the Hyde guidelines shows pre-tax profit reduced to £1.35m (£1m), after depreciation £284,000 (£245,000), cost of sales £47,000 (£91,000) less the gearing factor £60,000 (£92,000).

Meeting, Birmingham, November 6 at noon.

Improving trend for Lister

After its turnround from a £0.48m loss to a £1.43m profit in the March 31, 1978, year, Mr. I. E. Kornberg, chairman of Lister and Co. says the current trading position is showing an improvement which if sustained, gives directors reason to look to the future with confidence.

He says he is fully conscious of the need to conserve cash flow particularly as the group is still investing in new machinery whenever directors are satisfied the return will be adequate.

ISSUE NEWS

Anglesey £3m variable

vbgk cmf shr v bg cmf shr vbm

A placing has been made of £3m of variable rate stock by the Isle of Anglesey Borough Council.

The stock is dated 1983 and the placing price is £99¼ per cent.

In accordance with the requirements of the Stock Exchange Council £300,000 of the stock is available to the market.

CRODA DEFERRED

Dealings in the new deferred shares in Croda International got off to a reasonably active start yesterday.

The deferred shares, which were offered by way of scrip on the basis of one-for-ten, opened trading around 33½p and closed yesterday afternoon about 31½p, having eased to 30½p during the course of the day's trading.

BIDS AND DEALS

Mr. Field refuses to leave Dawson Board

Mr. Stanley Field, chairman of William Baird, has rejected a request for his resignation from the Board of Dawson International.

The request comes from Dawson's chairman, Mr. Alan Smith, who takes the view that there are potential conflicts of interest inherent in Mr. Field's continued presence on the Dawson Board. "Leading counsel has advised that Mr. Field's only proper course of action is to resign," Mr. Smith says. "Accordingly I have written to Mr. Field requring his resignation forthwith."

Mr. Field said last night that he has given "careful consideration to his position as a director of Dawson and, with the support of his advisers, he considers it would be entirely inappropriate for him to resign."

The resignation request is disclosed in a letter sent by Mr. Smith to Dawson shareholders outlining reasons for rejection of Baird's bid.

"Not only is there no commercial benefit to Dawson, we believe that a Baird take-over would be positively harmful to both home and export sales and this is supported by reactions we have received from customers," Mr. Smith says. "Also employees have expressed concern at the possibility of Dawson losing its independence and the bid, if successful, could irrevocably upset the necessarily close relationship we have developed over many years with our specialist raw material suppliers."

He forecasts a dividend of 14p a share (last year 3.75p), a scrip issue of one new "A" class nonvoting ordinary share for each ordinary and each "A" class share held, and indicated that the company is in the process of preparing a forecast of profits for the year ending March 31, 1979. If the bid fails, the "A" shares will be enfranchised as soon as practicable.

"Dawson's assets have not been revalued for many years, and are grossly understated," he says. "A revaluation of land, building and machinery is presently in hand and will show a very substantial appreciation on book values."

He points out that Dawson had £13.6m in cash at March 31, 1978 and states that "Baird wants to buy Dawson with the equivalent of Dawson's cash." He points out that to finance the cash element of the offer Baird's total borrowings will exceed £25.6m, against net tangible assets at December 31, 1977 of £26.8m and asks Baird to explain how it will repay "such high borrowings."

Mr. Field last night issued a statement saying that there is nothing in the Dawson defence document to cause Baird to alter its view that the offers it has made are fair.

"The contents of the letter confirm and reinforce Baird's objection to the Haggas proposals. These are now shown to have been even more than heavily weighted in favour of Haggas and against the best interests of Dawsons shareholders than was apparent before the letter from Dawson." Mr. Field said.

Baird's offer is due to close on October 27.

See Lex

AMERICAN ASSOCN.

The offers by J. M. Huber Corporation for the ordinary and preference capital of American Association have become unconditional. They will remain open until further notice.

Acceptances have been received in respect of 1,864,975 ordinary and 1,864,975 4 per cent noncumulative preference shares, which amount to 96.2 per cent of the ordinary and 96.2 per cent of the preference capital, respectively.

In respect of acceptances received by October 16, it is expected that remittances for the cash consideration due will be despatched by October 30th.

Huber intends to compulsorily acquire the outstanding shares in American Association.

Way cleared for Burmah's Australian sale

The way has been cleared for the Burmah Oil group to complete its A$36m disposal of its major stake in the Cooper Basin natural gas and liquids fields in South Australia. On August 31 it was reported that Burmah Oil Australia had agreed to sell a wholly owned subsidiary, Burmah Australia Exploration Pty. (BAE) to a group of companies headed by Bond Corporation Holdings.

BAE's assets are shares in three of the Cooper Basin partners—Santos 37.5 per cent, Basin Oil 30.86 per cent and Reef Oil 66.96 per cent. Santos has a 45 per cent interest in the Cooper Basin and is the operator.

The proposal hit a snag when Santos took an action in the New South Wales Equity Court seeking to block the purchase. Santos claimed that under agreements dating back several years Burmah had first to obtain the approval of the Santos Board before it could dispose of its holding, and that this had not been done.

Santos and Bond Corporation directors revealed yesterday that they had been holding discussions since early September and on the basis of mutual assurances, Santos had agreed to discontinue its legal action against Burmah which should enable completion of the deal.

It had also been agreed that three executives of Bond Corporation would be invited to the ten man Santos Board to replace the existing Burmah nominees.

Bond Corporation stood ready to make a "valuable contribution" to the continuing operations of Santos as an independent entity. A number of aspects which previously concerned Santos had now been clarified.

Tootal plans near £10m purchase of U.S. retailer

Tootal, the thread, textile and retail group, is planning its first acquisition in the U.S. since it bought American Thread in 1914. At that time anti-trust legislation forbad Tootal to increase its share of the American market even through diversification.

Now, although formal approval has not yet been gained for a lifting of the ban, Tootal is planning to spend £9.8m ($19.3m) on a New York public company called Ups 'n Downs.

Ups 'n Downs is a retail group which operates 155 fashion leisurewear shops mainly in the Eastern states.

In the year to January it had sales of $51m and made pre-tax profits of $3.5m. A spokesman for Tootal said that Ups 'n Downs was showing only low profits. Its profits have been as high as $6m but in the current year it will be hard work for it to meet $3m, as it ended the year on a low note which had not so far improved.

Nevertheless, Tootal believes the proposed acquisition to be a major step. The company had decided that its best method of penetrating the U.S. market was to buy into the retail end which could provide openings for exports for its textiles and garments both from the UK and Australia.

The group had looked at a number of manufacturers but decided against that method of entry.

Now it intends to concentrate on building up profitability at Ups 'n Downs and also to improve American Thread—at present its only significant U.S. subsidiary. American Thread itself also needed a better return on capital, the spokesman said. The new acquisition would justify a full-time senior executive in the U.S. who would divide his time between the two companies.

The bid for Ups 'n Downs, which has the recommendation of the Board will probably take until early next year to complete. The key element in its success is Tootal's option to purchase a 40 per cent stake owned by Merchant Investors Corporation.

MEYER BUYING INTO BAMBERGERS

Montague L. Meyer, the largest timber group in the UK, has been buying shares in Bambergers, the timber company which has recently received a £7.6m cash and shares bid from International Timber.

On October 3, the day after the announcement of the bid, Meyer bought 25,000 shares in Bambergers at 77p, and 100,000 at 80p: a week later, October 10, it bought a further 50,000 at 80p and the following day another 25,000 at 80p.

The total purchase of 200,000 shares amounts to around 2 per cent of the Bambergers equity.

Asked whether this was a prelude to a counter offer for Bambergers, Mr. John Meyer, chairman of Meyer, said yesterday: "We haven't yet seen the offer document for Bambergers so we will have to wait and see."

"But we like our investment in International," he added. Meyer holds about 13 per cent in International, a stake which it has been anxious to build up to prevent any dilution by International's bid for Bambergers.

Meanwhile, International's offer document for Bambergers is expected to appear towards the end of next week, and will include Bambergers' half-year results.

JAMAICA SUGAR TO WIND-UP

In his circular giving details of the sale of its sugar assets to National Sugar Company, Mr. H. C. Hart, the chairman of Jamaica Sugar Estates, says that although the proposals the directors recommend are in certain respects not particularly favourable, they are the best they have been able to negotiate.

The chairman says that based on the unaudited balance-sheet at September 30, 1977, after implementation of the proposals but at a rate of exchange of Jamaican dollar 3.25, the value of shareholders' equity is now £1,223,873.

The sale of interests will leave the company with no business of its own but only its investment in subsidiaries and the directors propose an orderly realisation of the subsidiaries or their assets to enable the company in due course to be wound up.

How long this will take is difficult to forecast, says the chairman, who points out that to give an estimate of the likely proceeds of such realisations is impossible as the realisation of these interests will almost certainly be less than book value and any real benefits from these should be discounted.

For the year ended September 30, 1977, the company incurred an increased loss of £616,808 compared with £209,369 last time, subject to a tax charge of £9,776 against a £44,722 credit.

TRIDANT GROUP

The 101,940 shares in Tridant Group Printers purchased by Baring Brothers on Thursday as advisors to Argus Press, one of the two bidders for Tridant, came from the holdings of Chirit Investments which represents family interests of Tridant's founders. In addition Argus also bought a further 20,000 shares on Friday at 100p. The Chirit sale was at 99½p.

WARREN TEA

Warren Plantation Holdings says the issue of $45,000 shares in Warren Tea Ltd. (the New Rupee Company) was 28 times oversubscribed.

There were 152,000 applications and allotments have been finalised on the basis of supporting small shareholders in accordance with the policy of the Government of India.

UU Textiles in reverse merger

Textile group U.U. Textiles is attempting to solve its financial problems through a merger with a small textile wholesaler, E. Salbstein. The deal, announced yesterday, involves a complicated financial reorganisation programme which once completed will give Mr. R. A. Ratner, chairman of Salbstein, and his family 59.3 per cent of U.U. Textiles' equity.

U.U. announced losses of £122,271 for a 61 week period to June 30 1978, compared with pre-tax profits of £62,815 for the 12 months ended April 30 1977. The group's accounting year end had been recently changed to June.

As a result of the losses U.U. showed a deficiency of net assets of £403,022. But after the implementation of the financial reorganisation and the merger with Salbstein, pro forma net tangible assets will amount to £1m, equivalent to 43.7p per ordinary 25p share.

To achieve this the following arrangements are planned:

- U.U.'s issued capital is to be reduced from £574,266 to £143,566.
- The outstanding £462,230 of loan stock in a U.U. subsidiary, Sidroy, is to be cancelled on payment of £208,003 in cash, and the issue of 369,784 shares of 25p each in U.U.
- The acquisition of the textiles wholesaling company Salbstein through the issue of 1,355,950 U.U. shares which represents the consideration.
- U.U.'s principal bankers are to assign the group's indebtedness of over £1m to Salbstein, less £730,000 at the time the reorganisation becomes effective. This will effectively reduce U.U.'s debt by £730,000.
- A term loan of £22,527 from the Department of Industry is to be waived.

Although after reorganisation the Ratner family will control 59.3 per cent of the equity, and therefore under Rule 34 of the City Takeover Code a full offer for the company should be made, this obligation has been waived by the Takeover Panel.

However, the Panel has asked that a majority of the independent shareholders, after a poll, should agree the proposals.

The combined pre-tax profits of the U.U. group and Salbstein before any extraordinary items for the six months ended December 31 1978 are expected to be not less than £20,000. In its last full financial year to November 30 1977 Salbstein made taxable profits of £30,658 on turnover of £519,704.

EGM has been called for November 8.

SHARE STAKES

Alexander Howden Group—K. V. Grob, director, has increased his beneficial holding by 225,000 shares, and R. C. Comery, director, has increased his by 75,000.

Walsham's — Esson Pension Trust has acquired an additional 15,000 shares, increasing holding to 140,000 (6.58 per cent).

F. S. Ratcliffe Industries—West Bromwich Spring on October 12, bought further shares and total holding is 40,500 (more than 5 per cent).

Scottish Ontario Investment—Aberdeen Trust holds 30,000 cumulative preference shares (5.9 per cent).

A. Monk—Prudential Assurance reports that, as a result of recent sales, they now hold less than 5 per cent of the ordinary capital.

Winterbottom Trust — Equity and Law Life Assurance Society has acquired a further 110,000 shares, increasing its holding to 1,365,000 (28.4 per cent).

East Midland Allied Press—The item reported on October 10 regarding directors' share holdings were allotments in a recent scrip issue, not purchases.

Scottish Homes Investment—Iron Trades Employees Ins. association has purchased 360,000 ordinary shares.

Sun Life Assurance Society:—Kuwait Investment Office has increased its interest to 5,125,000 shares (8.0 per cent) by purchase of 50,000 shares.

Provincial Laundries — A. B. Millar, director, has sold 300,000 shares (7.5 per cent) in order to take up in full his rights of 12 per cent convertible unsecured loan stock 1986-88 amounting to £29,740. Mentieth Investment Trust has acquired 250,000 shares (6.2 per cent) and £40,339 nil paid 12 per cent loan stock 1986-88 (11 per cent).

London Merchant Securities—Lord Rayne disposed of 100,000 shares on October 10 and is now interested in 30,558,653 shares.

ASSOCIATES DEALS

On October 13, Vickers da Costa (brokers to John Haggas) bought 5,000 Dawson International ordinary shares at 202p on behalf of a discretionary client.

A further 430,000 J. Compton Sons and Webb (Holdings) shares were bought on behalf of Vantona at 73½p, and L Messel and Co. sold 475,000 Compton at 73¾p for Allied Textile Companies, an associate of Compton.

NO PROBE

The proposed merger between Norsk Hydro A.S. and Vinatex is not to be referred to the Monopolies Commission.

MINING NEWS

Costs rise in the wake of the gold price

BY KENNETH MARSTON, MINING EDITOR

THE continued advance in working costs of South Africa's gold producers is underlined in the September quarterly reports issued by the Rand Mines group. After allowing for the previous quarter's income "bonus" arising from the changed method of payment on delivery for gold, all the mines have received higher revenue for their bullion production in the past quarter.

Increased working costs, however, have left East Rand Proprietary with an increased working loss for the quarter. Thanks to State aid, the mine comes out with a net profit, albeit one sharply reduced from that of the previous three months.

The other marginal producer, Durban Deep, has done well as a result of increased production coupled with a higher average gold price received. In this case there is a deduction for State aid over-provided which still leaves the mine with an increased net profit.

Increased revenue from uranium has resulted in Blyvoor making a slightly increased net profit. Harmony has achieved a higher working surplus but the incidence of a sharply increased tax charge has left the mine with a lower net profit than in the previous quarter.

The latest quarterly net profits are compared in the following table.

	Sept. qtr. R000	June qtr. R000	March qtr. R000
Blyvoor	8,393	8,215	6,938
Durban Deep	†1,847	†1,350	†609
E. Rand Pty.	‡678	†1,979	‡721
Harmony	10,094	13,449	7,026

† After receipt of State aid.
‡ After repayment of State aid.

AYER HITAM: A BETTER YEAR

Malaysia's tin-producing Ayer Hitam sees a brighter outlook for the current year to next June, provided that tin prices maintain their high levels.

The chairman, Tengku Tan Sri Indra Petra, points out that all three dredges are now working in virgin ground with a resultant increase in production. Output of tin concentrates for the past three months amounts to 453 tonnes against 362 tonnes in the same period of last year.

In the year to last June export duty and tax took 78.95 per cent of Ayer Hitam's group profits and the chairman calls for some relief for the industry from this "unreasonable burden."

He also comments on the diminishing supply of land with payable tin reserves in Malaysia and the fact that the company is still waiting for the authorities to approve the renewal of two important mining leases which expired in June this year.

In London yesterday the price of tin soared £435 to a record £7,840 per tonne following news that the U.S. Congress had adjourned without passing the General Services Administration stockpile releases Bill. It thus appears that the proposed release of stockpile tin cannot now take place until next year. Ayer Hitam shares were 330p yesterday.

AUSTRALIAN URANIUM HAS TO GO AHEAD

The deputy Australian prime minister, Mr. Doug Anthony, says that Aboriginal landowners' opposition to uranium mining will not stop development of the resources.

In a speech at the opening of a magnesite mine at Fifield in New South Wales, Mr. Anthony said the Government was disappointed that native landowners in the northern territory were opposed to uranium mining.

But he added that under government legislation allowing uranium mining, Aborigines could not withold consent for mining on their land.

If the government, mining companies and Aborigines could not agree on royalty payments and other conditions then an arbitrator would be appointed to solve the issue, Mr. Anthony said.

"What we have to consider is to what extent we can allow a small group of people, a manipulated group of people, to stand in the way of a development of tremendous national and international significance," he added.

Pacific Copper tungsten deal

CANADA'S Pacific Copper reports that its Australian affiliate company has negotiated a contract for all Pacific Copper's share of tungsten concentrate production from the Torrington mine in New South Wales to be sold to BOC Minerals, a division of British Oxygen. The contract runs for five years and is renewable for a further similar period.

Under the contract the first year's minimum deliveries must be 525 short tons and a minimum of 747 short tons in year two. There are no upper limits on the amount of production that can be sold.

Based on current world prices for tungsten concentrate the price per metric tonne unit under the BOC contract would yield approximately US$136 net per unit. A unit is 1 per cent of a metric tonne and based on a concentrate grade of 70 per cent tungsten, the net per tonne of concentrate would be $9,520.

The above tonnages are minimum only under terms of the contract and production is expected to be substantially higher as early production is to be from an area with a much higher grade of ore than the overall reserves.

Start-up of commercial production is scheduled for March 1979, and the first shipment of concentrates must be made to BOC Minerals no later than June 1979. Marketing of the mine's Topaz by-product is presently under negotiation with interested buyers.

Pacific Copper also expects to report shortly on cash flow on the tungsten property plus other activities including results of negotiations with a major company to develop the Mitchell's Flat coal reserves at New South Wales.

Arco confirms coal deal

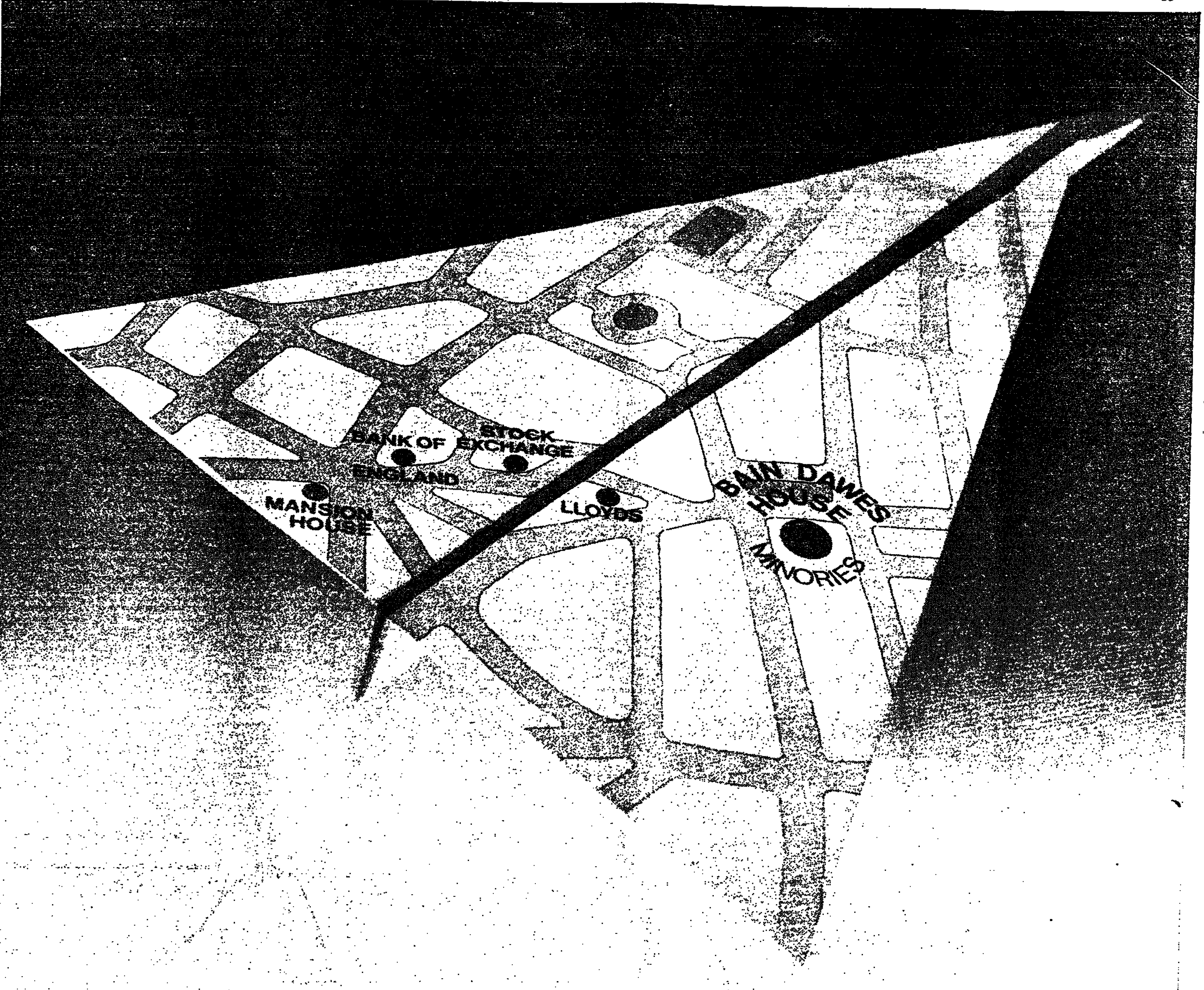
THE U.S. oil major, Atlantic Richfield has confirmed that it is expanding its coal interest in Australia with the purchase of a stake in a large steaming coal project in Queensland, reports James Forth from Sydney.

Arco has agreed to buy S and M Fox for U.S.$20m (£10.1m) from Universe Tankships, part of the Daniel K. Ludwig group.

S and M Fox owns 38 per cent of Blair Athol, which operates a 100,000 tonnes a year mine, but has for several years been examining the prospect of a large export operation, based on an annual output of about 5m tonnes.

An Arco spokesman said his company would work towards increasing output significantly for export. The other partner in Blair Athol is Conzinc Riotinto of Australia.

The Ludwig group has now disposed of all its Australian coal interests, apart from the Sirius coking coal operation in Queensland. About three months ago British Petroleum agreed to pay A$169m (£98m) for 50 per cent of New South Wales producer, Clutha Developments, only 18 months after BP bought the other 50 per cent from Clutha for a similar amount.



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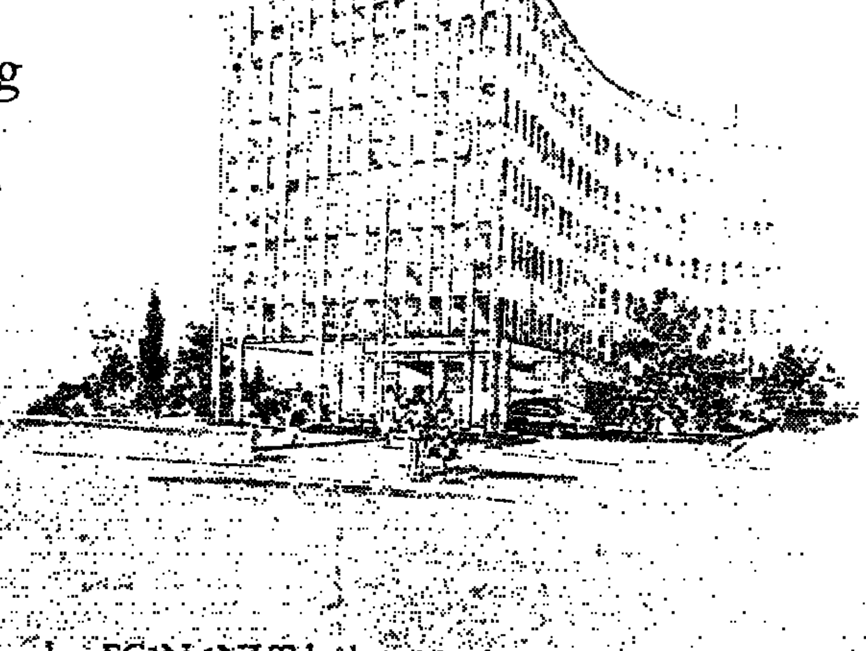

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Forward Technology big dividend increase

FOR THE June 30, 1978 year taxable profit of Forward Technology Industries was £1.57m compared with £1.43m in the previous 15 months. Turnover was £23.86m against £24.3m and the dividend total is up from 2p to 6.906p net.

Mr. Gordon Allen, the chairman, says the performance was generally good, although adverse results from Alfred Bader reduced profits by some £200,000 compared with the previous period.

He says the downturn at the lamp making machinery subsidiary was the result of a temporary reduction in orders from the lamp industry following the introduction of halogen technology. The outlook is however promising and additional investment in facilities is being made to meet anticipated demand.

Attributable profit of the group came out at £936,000 against £887,000 after tax of £342,000 (£403,000), minority interests of £21,000 (£49,000) and an extraordinary debit of £67,000 (£92,000).

Earnings per share are given at 12.2p (no comparison) and the final dividend of 3.906p takes the total from 2p to 6.906p. Forward's shares were reintroduced to the Stock Exchange in 1977 and the dividend cover of 1.77 times will form the base period under current legislation for future increases. The cover is increased to 4.62 times after waivers by Mr. Allen and his family of all but 0.001p per share on 4.98m shares. Mr. Allen's family settlement has also waived payments above 3p on 102,500 shares and Mr. John Green has waived payment above 4.78p on 127,053 shares. The dividend will cost £217,000 (£65,000).

Mr. Allen says the acquisition of Radyne and KLN in the year strengthened the group's industrial and marketing base.

Directors intend accepting an offer from an institution to purchase a property at its approximate book value of £1.7m and to lease it back at an initial annual rental of £165,000. The funds from the sale, along with the estimated £400,000 to be raised from the disposal of its remaining funeral parlours, will be put to reducing the group's overdrafts.

A share split from 50p to 25p units is proposed.

● comment

In spite of a temporary setback at Bader, where profitability fell back to break-even, Forward Technology's annualised pre-tax figures are a fifth higher, thanks to firm growth elsewhere in the electronics machinery division and also in the smaller distribution activities. The problem at Bader has been lack of a decision from the U.S. on new automobile lamp technology. Now that Ford (the market leader) has plumped for the Halogen system, Bader can expect a sharp increase in orders for the new machinery, although this is only likely to start making a significant impact on profits next year. Meanwhile, the payment of £3.5m for Radyn and KLN has lifted net borrowings to more than £6m — uncomfortably high when compared with shareholders' funds of a similar amount. Still, the company will be able to reduce this by £1.7m from a sale-and-leaseback deal while the disposal of certain properties will bring in another £0.4m. But overall interest charges will be higher for the year, but the two *acquisitions, which had combined* profits of £0.93m in 1977, will more than compensate. The shares yield 7.9 per cent at 134p, while the p/e is 10.7.

Senior Eng. up £0.1m at halftime

WITH TURNOVER up from £26.04m to £29.73m pre-tax profit of Senior Engineering Group advanced from £2.62m to £2.73m in the six months to June 30, 1978.

Professor R. Smith, the chairman, says the order intake in the first half of 1978 exceeded that of the same period last year and orders on hand have shown a further upturn. This has been achieved despite the current difficult economic situation, he says, and the group is well placed to take advantage of available growth opportunities.

The profit is after interest of £56,000 (£82,000). Net profit came out at £1.31m (£1.26m) after tax of £1.42m (£1.36m).

Earnings per 10p share are shown at 1.76p (1.69p) and the interim dividend is lifted from 0.5835p net to 0.6516p. An additional 0.0088p is also to be paid for 1977 when a 0.5836p final was paid on record profits of £5.25m.

Bejam growth continues

SALES OF food and freezers at Bejam Group in the current year are proving very satisfactory, Mr. J. D. Apthorp, the chairman tells members, and in addition to the turnover from branches opened last year, the group is achieving real growth in its established freezer food centres.

Mr. Apthorp says the two months leading up to Christmas are the most important part of the current half year and he therefore finds it difficult to make a forecast. However, based on the group's preformance in the first three months, the directors are reasonably optimistic for the six months and they are confident for the 1978/79 year as a whole.

As reported on October 6, little changed second-half profits, at £2.08m against £2.14m, left the full year's figure lower at £4.42m for the period ended July 1, 1978 compared with the previous year's record £4.8m. The net dividend is effectively increased to 1.621p (1.452p) per share.

During the year 15 freezer food centres were opened, one of which was in Plymouth, the group's first store in the West Country. Also, extensions were made to existing stores in eight areas. Three centres were closed in the period, the chairman says, those at Brighton and Farnham following the opening of larger branches elsewhere in the same towns.

Total selling area increased in the year from 416,000 sq. ft. in 132 locations to 473,000 sq. ft. in 144 locations.

The group is continuing its expansion programme and in the current year new branches have been opened in Chippenham, Devizes, Sutton and Swindon. Further stores are to be opened before the end of 1978 in Bedford, Gravesend, Harbourne, Lincoln, Salisbury, Tonbridge and Tottenham.

Meeting, Winchester House, E.C., November 10 at noon.

Campari taking longer view

DIRECTORS OF Campari, the active leisure group, are looking forward to the outcome of the current year with cautious optimism, Mr. G. K. Benscher, the chairman, says in his annual statement.

He says they expect some early financial reward to materialise from new investments, but he believes it prudent to take a longer term view since further internal investment may be needed to consolidate the basis necessary to maximise the financial return of its expansion programme.

In the UK, where 68.4 per cent of the group's 1977-78 turnover of £15.02m was achieved, current business is buoyant and the forward order book is satisfactory.

In Sweden, where the group has now seen its first eight months of operation, there is clear evidence that Campari will enjoy a bigger share of the leisure market this year. Warehousing and administrative staff are coping well with increasing demand and existing capacity is well placed to convert this demand into sales and to improve profitability.

In Germany, the potential size of the market provides the group with a lucrative opportunity, although further investment in management and internal financial outlays may be called upon before the full benefits can be realised.

Following the setting up of the German operation, the Dutch subsidiary can now focus its attention on the Benelux market, and Mr. Benscher says a gratifying increase in business is already becoming evident.

As previously reported, taxable profit in the May 31, 1978, year advanced from £1.64m to £1.75m.

The balance-sheet shows a sharp growth in borrowings in the year from £3.4m to £5.45m to a level almost equal to shareholders' funds of £5.61m (£3.93m). Of the total, long term loans made up £729,000 (£424,300) and bank overdrafts £4.72m (£2.93m) with £0.44m (£0.4m) unsecured. The long term bank loan has since the year end been repaid and replaced by a £0.8m borrowing repayable over three years from October 1981.

Fixed assets are shown at £1.71m (£1.11m) and in the year current assets grew from £9.13m to £12.61m and current liabilities rose from £5.89m to £8.02m.

Meeting, Abercorn Rooms, Bishopsgate, EC, at noon.

BOARD MEETINGS

The following companies have notified dates of Board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether dividends are interims or finals and the sub-divisions shown below are based mainly on last year's timetable.

TODAY

Interims—Central and Sherwood, Erith, Furness Withy, Kode International, Manchester Liners, Marks and Spencer, M. F. North, Provident Life Association of London, Siemssen Hunter, Spirax-Sarco Engineering, Westpool Investment Trust, Wettern Brothers.

Finals—William Boulton, Brooke Bond Liebig, Raine Engineering Industries.

FUTURE DATES

Interims—	
Advance Laundries	Nov. 24
Boosey and Hawkes	Oct. 25
Boot (Henry)	Oct. 26
Chamberlain Group	Oct. 23
Downiebrae	Oct. 25
Eastern Produce	Oct. 19
London Brick	Oct. 26
Miller (Stanley)	Oct. 20
Nathan (B. and I.)	Oct. 23
Tozer Kemsley and Millbourn	Oct. 24
Finals—	
Ductile Steels	Oct. 24
Guildhall Property	Oct. 19
Helical Bar	Oct. 19
London and Montrose Invest. Tst.	Oct. 19
London Shop and Property Trust	Oct. 19
Newman-Tonks	Oct. 23
Rosehaugh	Oct. 26

Wood and Sons ahead at halfway

AFTER REPORTING a healthy order book and forecasting continued prosperity, Wood and Sons (Holdings) increased taxable profit 12.6 per cent from £214,000 to £241,000 in the first half of 1978.

Turnover was 11.8 per cent higher at £2.3m and profit is after charging depreciation, directors' remuneration, audit fees and interest charges totalling £101,000 (£95,000).

After tax of £15,000 (£8,000), net profit of the earthenware and packing material manufacturer was ahead £20,000 to £226,000.

The interim dividend is more than doubled from 0.33p net per 5p share to 0.67p. Last time a 0.3322p final was paid on peak net profits of £253,189.

● SOUTH AFRICAN DISPOSALS

The high cost of pulling out

BY MARTIN TAYLOR

Tate and Lyle's plans to divest itself of its majority holding in African Products are the latest reminder of the anxiety, shared by many British companies, to pull out of South Africa despite the sometimes high cost of doing so.

GEC, Guardian Royal Exchange, RACAL and Drake and Scull all reduced or disposed of their South African interests earlier this year while Reed International has recently managed to dispose of its 62.5 per cent holding in Nampak packaging to Barlow Rand after an earlier attempt to sell it had fallen through. BL is arranging to reduce its exposure.

The potential cost of disposing of a South African subsidiary results from exchange controls which oblige a foreign company making a direct investment in the country to buy its Rand at the free market rate (R1=$1.15), while only allowing disinvestment through the floating securities Rand market. A non-resident may sell the Rand he receives when he disposes of his direct investment only to other non-residents through the pool of securities Rand, which currently stands at a discount of 36 per cent below the free Rand.

In the case of Tate and Lyle the direct loss is not as high as it would have been if it had actually bought free rand for the acquisition of African Foods: it came into its stake in the company by taking over Manbre and Garton in 1976. Nevertheless, it faces the prospect of realising an asset for cash at 36 per cent below its market value, which is a very expensive way of raising money.

Tate and Lyle will be negotiating with the Reserve Bank of South Africa for permission to sell at least some of the Rand it receives for African Products at the free market rate. The Reserve Bank does occasionally grant such an exemption from exchange control depending on the particular case, usually when it is happy, for strategic reasons, for the company being disposed of to end up in South African hands.

Last year Tate and Lyle was allowed to take out 36 per cent of the proceeds of its sale of Illovo, another South African subsidiary, through the free market, and in August this year the engineering company Barton and Sons was given a similar dispensation. another way out was followed by Reed, whereby Barlow Rand borrowed foreign currency with which to pay two-thirds of the purchase price of Nampak. But on the whole the foreign seller can expect to receive securities rand for the bulk of the assets he sells.

Until the budget last spring securities Rand could be converted into free Rand if they were put into South African government or public utility stock and left there for at least five years to maturity. The budget left only one vehicle through which the conversion could be made — a six per cent stock which has to be held for seven years, and which is non-transferable and non-negotiable. It is not surprising that companies which are *leaving* South Africa for political reasons in any case may prefer to take an immediate loss through the securities [illegible] rather than a seven-year risk [illegible] a low running interest rate, [illegible] the South African economic [illegible] political system, and or [illegible] devaluation the rand may [illegible] go in that period.

The controls as they stand [illegible] a strong, although not over[illegible] whelming, discouragement to the sale of assets held in South Africa by non-residents. [illegible] are also a formidable discourage[illegible]ment to new direct investment which at present must be [illegible] through the free rand. [illegible] have been suggestions that [illegible] Commission set up to study [illegible] exchange controls, under [illegible] chairmanship of Dr. Gerhard [illegible] Kock, the finance minister's special economic adviser, [illegible] propose the creation of a [illegible] rand to be used for non-resident capital transactions.

At first, it is argued, the financial rand would sink to the level of the securities rand as foreign companies took advantage of [illegible] to pull assets out of South Africa but at this level it should attract risk capital into the country and move back up to a narrower discount below the free rand.

The main argument against this is that it might lead to an embarrassing rush to leave South Africa and highly unstable capital flows. Certainly a number of companies may be waiting for the de Kock proposals before taking the decision to pull out, but if in the end there are [illegible] changes in the exchange controls they may decide to pull out any way.

22% improvement by Close Brothers

A 22 per cent increase in pre-tax profits from £147,000 to £180,000 is reported by Close Brothers, merchant banker, for the year to June 30, 1978.

Deposits taken also rose substantially, standing at some £10.3m at the year-end compared with £5.5m the year before. The growth was partly the result of the bank's participation during the year in Spry Finance, a joint venture money-market company operated with Bristol stockbrokers, Stock and Co. On December 20, 1977, the company acquired a 96 per cent holding in Spry.

The directors state that in the current year they will be looking to consolidate further the development of the company's money market activities.

The increase in commercial loans and advances has been cautious and selective, the directors report. Rather than lend on positions of insufficient quality, they have, at a time of generally slack loan demand, preferred not to lend. However, they have both put out and been repaid short-term loans during the year under review, and they have continued to involve themselves in the financing of stock and goods.

The company's insurance premium financing scheme has been well received and the directors are confident that steady demand for this service will continue.

On the advisory side, fee income was well up and the year was more active. The bank had its share of takeover and fund-raising activity and the number of clients, both public and private, increased markedly.

The ultimate holding company is Consolidated Gold Fields.

YULE CATTO

The High Court has confirmed the reduction of capital of Yule Catto and the order will be registered by October 20.

The effect is that shareholders registered on October [illegible] will receive 11p for each ordinary share: warrants will be despatched on October 26.

OIL AND GAS NEWS

Beaufort Sea tests hit by weather

BY ROBERT GIBBENS — MONTREAL, Oct. 16

BECAUSE OF heavy ice flows and gale force winds Dome Petroleum will not go ahead with testing of its two key discovery wells in the deeper waters of the Beaufort Sea, above the Mackenzie Delta this season. The two wells are Kopanoar M-13 and Ukalerk 2C-50 and Dome have reported hydrocarbon shows in both.

Testing of potential reservoirs will be conducted early in the drilling season next year, Dome said. This indicates that some casing has been set and the testing will proceed next July. The company have also said that it cannot assess whether the wells are commercial until testing is done. However, industry sources in Calgary believe that there may be major reservoirs.

The Dome drill ships are being moved to other locations in the Beaufort Sea where shallow drilling can be done. The shallow drilling season ends in early December depending on weather conditions.

* * *

The Royal Dutch/Shell group has discovered oil sands in a gas field off the shore of the East Malaysian state of Sarawak.

Tests are being conducted to assess the significance of the oil indications found in the Central Luconia gas province about 120 miles from the coast. Additional appraisal wells will be required to assess the extent of the oil deposit and its commercial value.

A unit of Shell operates seven producing fields in Sarawak waters under a production-sharing agreement with the National Petronas Oil Company. Daily production currently is about 90,000 barrels of crude oil.

* * *

Mr. W. H. Hopper, President of Petro-Canada, says his company and Ranger Oil (Canada) have been asked to make a firm proposal to the Chinese Government to participate in offshore petroleum exploration. Mr. Hopper has just returned from visiting China with a small group of senior Canadian businessmen.

* * *

Husky Oil expects to spend about $30m by the end of 1978 in the Lloydminster area on the Alberta-Saskatchewan border and will have a total of 2,000 wells in the region at the year end, according to Mr. James E. Nielson, Husky Oil's president. The company plans to complete 205 wells in Lloydminster this year.

* * *

Pacific Petroleum has completed two more wells in the West Pembina area of Alberta.

One of the wells, the Pacific [illegible] Al Brazr 15-23-48-13 W5M produced 1,300 barrels a day in initial testing. Pacific holds a one-third interest in the well. Amoco Canada Petroleum and Texaco Canada hold the remaining two-thirds.

The second well, Pacific Amoco Brazr 3-20-48-12 W5M well produced gas rates during initial testing of 6.0m cubic feet per day, plus 1,200 barrels of condensate. Pacific and Amoco each control 50 per cent of this well. Pacific Petroleum now has successful oil and gas wells, three gas and seven oil, in the West Pembina area.

COURTNEY, POPE (HOLDINGS) LIMITED

PRELIMINARY STATEMENT FOR FINANCIAL YEAR ENDED 31st MAY, 1978

The audited result of the financial year ended 31st May, 1978 is as follows:

	1978 000's £	1977 000's £
Turnover	17,980	15,724
Profit before Tax	841	732
Taxation	274*	383
Profit after Tax	567	349
Earnings per 20p share (after Tax)	11.58p	7.10p
Dividend (per Share):		
Proposed Final	1.4171p	1.1660p
Making Total for Year	2.4171p	2.1660p

* After deducting £158,000 relief for increase in stock levels.

External Sales and Profits both advanced by approximately 15% over the levels for the previous year. The year has been one of consolidation and continued rationalisation.

The current year has started well and order books, both for home and export business, stand at the highest level ever in the Company's history. Although margins are constantly under pressure, your directors are confident that in the absence of unforeseen circumstances, profits for the current year will show a further record.

D. H. PEACOCK, Deputy Chairman

Rand Mines Limited

A Member of the Barlow Rand Group

Gold Mining and Colliery Company Reports for the Quarter ended 30th September 1978

(All Companies incorporated in the Republic of South Africa)

Office of the Secretaries of the undermentioned companies in the United Kingdom: 40, Holborn Viaduct, London EC1P 1AJ.

HARMONY GOLD MINING COMPANY, LIMITED

ISSUED CAPITAL: R13 442 325 IN 26 884 650 SHARES OF 50 CENTS EACH
REPORT OF THE DIRECTORS FOR THE QUARTER ENDED 30TH SEPTEMBER, 1978

OPERATING RESULTS—ALL PRODUCTS	Quarter ended 30.9.1978	Quarter ended 30.6.1978
Ore milled (t)	1 861 000	1 731 000
Gold produced (kg)	8 074	7 590
Yield (g/t)	4.34	4.38
Uranium		
Pulp treated (t)	1 266 000	1 211 000
Oxide produced (kg)	133 974	131 108
Yield (kg/t)	0.106	0.108
Pyrite		
Concentrate recovered (t)	22 408	21 486
Sulphuric acid produced (t)	32 263	36 959
Total Revenue (R/t milled)	31.90	29.61
Total Costs (R/t milled)	23.22	22.67
Total Profit (R/t milled)	8.68	6.94
FINANCIAL RESULTS—ALL PRODUCTS—TOTALS IN R000's		
Revenue—Gold, Silver and Osmiridium	R45 769	R41 654
—Uranium, Pyrite and Sulphuric Acid	R13 603	R9 605
Total revenue	R59 372	R51 259
Costs	R43 208	R39 252
Working profit	R16 164	R12 007
Sundry revenue—net	R958	R766
Profit before taxation and State's share of profit	R17 122	R12 773
Taxation and State's share of profit	R7 028	R325
Profit after taxation and State's share of profit	R10 094	R12 448
Capital expenditure	R3 182	R8 341
Dividend declared	R9 947	R—
Loan Levy	R813	R46
Loan Levy Refund (1972)	R119	R—
SHAFT SINKING		
Merriespruit No. 2A Upcast Ventilation Shaft		
Advanced—metres	244	96
Depth to date—metres	338	94

DEVELOPMENT

Quarter ended 30.9.1978: 10 099 metres — Quarter ended 30.6.1978: 8 799 metres

Reefs	Advanced on Reef Horizon Metres	Sampled Metres	Gold Value g/t	Uranium Oxide Value kg/t	Channel Width cm	Gold cm.g/t	Uranium Oxide cm.kg/t
Basal	303	236	12.7	0.249	109	1 381	27.13
Leader	1 917	1 722	6.5	0.169	105	684	19.89
Totals and Averages:							
Quarter ended 30.9.1978	2 225	1 958	7.2	0.196	106	768	20.76
Quarter ended 30.6.1978	1 355	1 062	6.9	0.252	110	759	27.69

These values represent actual results of sampling, no allowance having been made for any adjustments which may be necessary when the ore reserve estimates are made at the end of the financial year.

DIVIDEND

Interim dividend No. 44 of 37 cents per share was declared on 14th September, 1978 payable on or about 2nd November, 1978 to shareholders registered on 29th September, 1978.

CAPITAL EXPENDITURE

There are commitments for capital expenditure amounting to R9 087 000 which includes R7 323 000 for the new uranium plant. The estimated total capital expenditure for the remainder of the current financial year is R25.109 million which includes R14.076 million for the new uranium plant.

GENERAL

Of the R3 182 000 capital expenditure reflected for the quarter, R544 000 was financed by the consumer loan for the new uranium plant.

For and on behalf of the board
D. T. WATT
R. J. J. FOURIE — Directors

9th October 1978.

EAST RAND PROPRIETARY MINES, LIMITED

ISSUED CAPITAL: R3 960 000 IN SHARES OF R1.00 EACH
REPORT OF THE DIRECTORS FOR THE QUARTER ENDED 30TH SEPTEMBER, 1978

OPERATING RESULTS	Quarter ended 30.9.1978	Quarter ended 30.6.1978
Gold		
Ore milled (t)	493 000	473 000
Gold produced (kg)	2 590.2	2 554.0
Yield (g/t)	5.25	5.40
Revenue (R/t milled)	30.00	29.73
Cost (R/t milled)	34.51	31.77
Profit (loss) (R/t milled)	(4.51)	(2.04)
Revenue (R000's)	14 791	14 061
Cost (R000's)	17 015	15 025
Profit (loss) (R000's)	(2 224)	(964)
FINANCIAL RESULTS (R000's)		
Working profit (loss) Gold	R(2 224)	R(964)
Sundry revenue (net)	R88	R99
State Assistance claimed	R2 903	R3 002
Profit before taxation and State's share of profit	R767	R2 137
Taxation and State's share of profit	R89	R158
Profit after taxation and State's share of profit	R678	R1 979
Capital expenditure	R591	R774
Loan Levy	R13	R22

DEVELOPMENT

Quarter ended 30.9.1978: 3 305 metres — Quarter ended 30.6.1978: 2 872 metres

Reefs	Advanced on Reef Horizon Metres	Sampled Metres	Gold Value g/t	Channel Width cm	Gold cm.g/t
South	127	129	3.3	84	278
Composite	26	33	211.8	22	4 736
Main	104	117	4.1	86	352
Main Reef Leader	—	—	—	—	—
Totals and Averages:					
Quarter ended 30.9.1978	257	279	10.8	78	836
Quarter ended 30.6.1978	239	177	4.2	84	348

These values represent actual results of sampling, no allowance having been made for any adjustments which may be necessary when the ore reserve estimates are made at the end of the financial year.

CAPITAL EXPENDITURE

There are commitments for capital expenditure amounting to R690 000. The estimated total capital expenditure for the remainder of the current financial year is R1.6 million.

For and on behalf of the board
D. T. WATT (Chairman)
R. J. J. FOURIE — Directors

6th October 1978.

DURBAN ROODEPOORT DEEP, LIMITED

ISSUED CAPITAL: R2 325 000 IN SHARES OF R1.00 EACH
REPORT OF THE DIRECTORS FOR THE QUARTER ENDED 30TH SEPTEMBER, 1978

OPERATING RESULTS	Quarter ended 30.9.1978	Quarter ended 30.6.1978
Gold		
Ore milled (t)	576 000	541 000
Gold produced (kg)	2 332.5	2 193.9
Yield (g/t)	4.05	4.06
Revenue (R/t milled)	23.72	21.81
Cost (R/t milled)	20.58	20.01
Profit (R/t milled)	3.14	1.80
Revenue (R000's)	13 662	11 797
Cost (R000's)	11 855	10 825
Profit (R000's)	1 807	972
Pyrite		
Pyrite concentrate sold (t)	6 895	7 323
FINANCIAL RESULTS (R000's)		
Working profit—Gold	R1 807	R972
—Pyrite	R91	R82
Sundry revenue (net)	R107	R78
State Assistance claimed (overprovided)	R(158)	R218
Profit before taxation and State's share of profit	R1 847	R1 350
Taxation and State's share of profit	R—	R—
Profit after taxation and State's share of profit	R1 847	R1 350
Capital expenditure	R521	R311

DEVELOPMENT

Quarter ended 30.9.1978: 5 297 metres — Quarter ended 30.6.1978: 4 341 metres

Reefs	Advanced on Reef Horizon Metres	Sampled Metres	Gold Value g/t	Channel Width cm	Gold cm.g/t
Kimberley	1 236	1 026	5.1	85	437
South	312	282	21.5	14	301
Main	149	111	7.5	82	617
Totals and Averages:					
Quarter ended 30.9.1978	1 697	1 419	6.0	71	424
Quarter ended 30.6.1978	1 483	1 344	6.2	71	443

These values represent actual results of sampling, no allowance having been made for any adjustments which may be necessary when the ore reserve estimates are made at the end of the financial year.

CAPITAL EXPENDITURE

There are commitments for capital expenditure amounting to R36 000. The estimated total capital expenditure for the remainder of the current financial year is R172 000.

GENERAL

Dewatering of the lower levels of the mine, which were flooded at the end of January, 1978, was completed during the quarter.

For and on behalf of the board
D. T. WATT (Chairman)
N. A. HONNET — Directors

6th October, 1978.

BLYVOORUITZICHT GOLD MINING COMPANY, LIMITED

ISSUED CAPITAL: R6 000 000 IN 24 000 000 SHARES OF 25c EACH
REPORT OF THE DIRECTORS FOR THE QUARTER ENDED 30TH SEPTEMBER, 1978

OPERATING RESULTS	Quarter ended 30.9.1978	Quarter ended 30.6.1978
Gold		
Ore milled (t)	494 000	476 000
Gold produced (kg)	4 983.6	4 966.1
Yield (g/t)	10.09	10.43
Revenue (R/t milled)	57.90	57.67
Cost (R/t milled)	30.62	28.49
Profit (R/t milled)	27.28	29.18
Revenue (R000's)	28 603	27 454
Cost (R000's)	15 128	13 563
Profit (R000's)	13 475	13 891
Uranium Oxide		
Pulp treated (t)	449 388	447 535
Oxide produced (kg)	71 131	71 519
Yield (kg/t)	0.158	0.160
FINANCIAL RESULTS (R000's)		
Working profit: Gold	R13 475	R13 891
Working profit: Uranium oxide	R2 984	R1 923
Sundry revenue (net)	R581	R584
Profit before taxation and State's share of profit	R17 040	R16 398
Taxation and State's share of profit	R8 647	R8 183
Profit after taxation and State's share of profit	R8 393	R8 215
Capital expenditure	R2 176	R2 274
Dividend declared	R—	R7 920
Loan Levy	R1 001	R944
Loan Levy Refund (1972)	R357	R—

DEVELOPMENT

Quarter ended 30.9.1978: 5 366 metres — Quarter ended 30.6.1978: 5 095 metres

Reefs	Advanced on Reef Horizon Metres	Sampled Metres	Gold Value g/t	Uranium Oxide Value kg/t	Channel Width cm	Gold cm.g/t	Uranium Oxide cm.kg/t
Main Reef	—	—	—	—	—	—	—
Carbon Leader	107	100	102.5	0.821	12	1 230	9.86
Quarter ended 30.6.1978							
Main Reef	24	6	8.2	0.455	11	90	5.01
Carbon Leader	—	16	270.2	1.019	17	4 593	17.32

These values represent actual results of sampling, no allowance having been made for any adjustments which may be necessary when the ore reserve estimates are made at the end of the financial year.

CAPITAL EXPENDITURE

There are commitments for capital expenditure amounting to R2 300 000. The estimated total capital expenditure for the remainder of the current financial year is R10.0 million.

GENERAL

Members were informed in a press announcement on 11th August 1978 that on 9th August a fire had occurred in a section of the main overland conveyor which transports ore from No. 4 shaft to the mill, resulting in the collapse of a section of the conveyor gantry steelwork. A temporary conveyor was immediately installed while the damaged section was being repaired. The main conveyor was back in operation on 15th August, 1978. The loss in milled tonnage was approximately 24 000 tons. An insurance claim will be lodged in due course to cover the cost of repairs as well as the standing charges and increased cost of working during the period milling operations were affected.

For and on behalf of the board
D. T. WATT (Chairman)
N. A. HONNET — Directors

6th October 1978

WELGEDACHT EXPLORATION COMPANY, LIMITED

ISSUED CAPITAL: R4 090 813 IN SHARES OF 45 CENTS EACH

REPORT OF THE DIRECTORS FOR THE QUARTER ENDED 30TH SEPTEMBER, 1978 ON THE OPERATIONS OF THE COMPANY AND ITS WHOLLY-OWNED SUBSIDIARY

OPERATING RESULTS	Quarter ended 30.9.1978	Quarter ended 30.6.1978
Tons sold—metric	480 109	546 489
Working profit—cents per ton	112.7	445.1
FINANCIAL RESULTS (R000's)		
Working profit	R541	R2 433
Net railway revenue	9	227
Net sundry revenue	486	182
PROFIT BEFORE TAXATION	R1 036	R2 842
Taxation	(249)	725
PROFIT AFTER TAXATION	R1 285	R2 117
Capital expenditure	R1 316	R919
Drilling and exploration (included in net sundry revenue)	5	10
Dividend declared	—	818

CAPITAL EXPENDITURE

There are commitments for capital expenditure amounting to R1 373 000.

GENERAL

Inland market demand in August and September has experienced an abnormally large seasonal reduction and exports have been affected to some extent by mechanical breakdowns at Richards Bay.

Working profit has been depressed from the exceptionally high level achieved in the previous two quarters by:

(a) A surcharge of R330 000 relating to the company's use of the Richards Bay Coal Terminal.
(b) The decrease in tonnage sold.
(c) Lower export realisations.
(d) Year end adjustments to the open pit contract and increased provision for replacements and renewals.

Net sundry revenue includes a dividend of R544 000 from Richards Bay Coal Terminal Company (Proprietary) Limited.

Taxation has been reduced through the high capital expenditure and the non-taxable dividend income.

For and on behalf of the board.
N. ZOLEZZI
P. C. HOWARD — Directors

9th October 1978

WITBANK COLLIERY, LIMITED

ISSUED CAPITAL: R17 611 394 IN ORDINARY SHARES OF R2 EACH
REPORT OF THE DIRECTORS FOR THE QUARTER ENDED 30TH SEPTEMBER 1978 ON THE OPERATIONS OF THE COMPANY AND ITS WHOLLY-OWNED SUBSIDIARIES

OPERATING RESULTS	Quarter ended 30.9.1978	Quarter ended 30.6.1978
Tons sold—metric	1 791 585	1 852 245
Working profit—cents per ton	389.9	534.7
FINANCIAL RESULTS (R000's)		
Working profit	R6 986	R10 830
Net sundry revenue	1 505	444
PROFIT BEFORE TAXATION	R8 491	R11 274
Taxation	57	2 507
PROFIT AFTER TAXATION	R8 434	R8 767
Capital expenditure	R10 851	R6 490
Exploration expenditure—included in net sundry revenue	150	89
Dividend declared	4 423	—

DIVIDENDS

Dividend No. 144 of 65 cents per share was declared on 14th August 1978 payable on or about 25th September 1978 to shareholders registered on 1st September 1978.

CAPITAL EXPENDITURE

There are commitments for capital expenditure, net of Escom funding in respect of Duvha, as follows:

	R000's
Contracted	25 213
Authorised but not contracted	22 563
Other proposed expenditure on Duvha Colliery	15 206
	R62 982

GENERAL

Demand in the inland market reflected the normal seasonal reduction in August and September and exports have been affected to some extent by mechanical breakdowns at Richards Bay.

Working profit has also been reduced from the high level of the previous quarter by:

(a) A surcharge of R1 272 000 relating to the company's use of the Richards Bay Coal Terminal; and
(b) A levy of R214 000 paid to T.C.O.A. for marketing the company's products; and
(c) Fluctuations in export receipts; and
(d) Increased year end provisions for replacements and renewals.

Net sundry revenue includes dividends of R1 330 000 and R349 000 received from Richards Bay Coal Terminal Company (Proprietary) Limited and The Transvaal Coal Owners Association (1923) (Proprietary) Limited.

Taxation has been reduced through the high capital expenditure and the non-taxable dividend income.

For and on behalf of the board.
N. ZOLEZZI
P. C. HOWARD — Directors

9th October 1978

GENERAL NOTES

1. Gold development values quoted herein represent actual results of sampling, no allowance having been made for any adjustments which may be necessary when estimating ore reserves at the end of the respective financial years.
2. All financial figures are subject to audit.

Copies of these quarterly reports are obtainable from the United Kingdom Registrars and Transfer Agents Charter Consolidated Limited, P.O. Box No. 102, Charter House, Park Street, Ashford, Kent TN24 8EQ.

Currency, Money and Gold Markets

Dollar weak: D-mark strong

Basic sentiment in the dollar was largely unaffected by the recently announced revaluation of the West German mark within the European snake. The success of the U.S. authorities in completing the Energy Bill was seen as only the tip, if the rest of the iceberg was resolving inflation and the present unsatisfactory trade position. Consequently the U.S. currency continued to decline after a slightly firmer start. Against the Swiss franc it fell to SwFrs 1.5192½ compared with SwFrs 1.5265 on Friday. Earlier in the day it had touched SwFrs 1.5430. The D-mark opened at DM 1.8600 and eased to DM 1.8775 before dollar weakness pushed the rate up to DM 1.8500 and a closing rate of DM 1.8530 against the DM 1.8600 previously. This was despite intervention by the Swiss and German central banks. Using Morgan Guaranty figures at noon in New York, the

100=DM	Central Rate	Intervent'n points Upper	Lower
DKr	35.43134	36.235	34.645
NKr	37.0735	37.915	26.250
BFr	6.36277	6.508	6.221
Fl	92.2767	94 375	90.225

dollar's trade weighted average depreciation widened to an all time record of 10.6 per cent from Friday's level of 10.2 per cent.

The D-mark's revaluation had been anticipated for some time, presenting itself as the most convenient move to lessen the pressure within the snake. However initial reactions appeared to register disappointment at the small size of the adjustment, with dealers suggesting that this condemned it to being a short-term solution and that the D-mark was likely to climb again to its ceiling within the snake before long.

Sterling opened at $1.9785 and eased on the initial firmness of the dollar to $1.9720 although by noon it had recovered to $1.9775. As the dollar weakened so the pound touched $1.9800 and with U.S. centres echoing the sentiment in Europe, sterling closed at $1.9885-1.9895, a rise of 25 points from Friday's close. While the pound was weaker against the D-mark at DM 3.6875 against DM 3.6950, it was firmer overall and its trade weighted index as calculated by the Bank of England, improved to 62.2 from 62.1, having stood at 62.0 at noon and in early dealings.

FRANKFURT—The dollar was fixed at DM1.8700 against DM1.862 previously. News of the U.S. energy package helped the dollar offset the D-mark's revaluation within the snake. The market greeted the measure with limited enthusiasm but still kept one eye on the more fundamental problems affecting the U.S. economy.

AMSTERDAM—The dollar was fixed at Fl 12.0385 compared with Friday's fixing of Fl 12.0215. The new intervention rates were set at Fl 105.960-110.885 per DM 100 and in early trading the D-mark was quoted at Fl 109.30 per DM 100 in early trading and eased to Fl 109.10 around mid-day, well within the upper intervention point.

MILAN—In the aftermath of the D-mark's revalation, the dollar was fixed sharply higher against the lira at L819.55 compared with L813.95 previously. Of the $16m traded at the fixing, the Bank of Italy sold around $8m. The D-mark and the yen were also up against the lira at L438.60 for the D-mark, an all-time high, and compared with Friday's rate of L437.44, and L4.42 from L4.378 in terms of the yen.

VIENNA—The Austrian schilling was devlued by 1 per cent against the D-mark which means, after the D-mark's readjustment, a revaluation of 1 per cent against the Belgian and Dutch currencies and a 3 per cent revaluation against the Norwegian and Danish currencies. The schilling was fixed at 732.95 per 100 D-marks compared with 725.75 on Friday.

TOKYO—The U.S. $ closed at Y186.15 against the yen, down from Friday's level of Y188.70. Its poorer performance came ahead of Japanese trade figures for September which were widely anticipated as being larger than originally expected. Figures released after the close of trading gave Japan a surplus of $1.95bn compared with $1.53bn in August.

In early trading the dollar was slightly stronger, with some demand for import settlements, before easing later in the day. After touching Y186.45 early on, the rate fell briefly to Y186.0. Trading in the spot market totalled $407m, with combined forward and swap trading accounting for $576m.

THE POUND SPOT

Oct. 16	Bank rate %	Day's spread	Close
U.S. $	9½	1.9720-1.9896	1.9885-1.9895
Canadian $	10¼	2.3255-2.3620	2.3545-2.3516
Guilder	6½	4.01-4.04½	4.02¾-4.03¾
Belgian F	6	58.10-58.60	58.50-58.45
Danish K	8	10.28-10.31	10.28½-10.29½
D-Mark	3	3.68-3.72	3.68¾-3.69¾*
Port. Esc.	18	89.25-89.75	89.25-89.75
Span. Pes.	8	138.25-140.25	140.15-140.25
Lira	10½	1,606-1,629	1,627½-1,628½
Norwgn. K.	7	9.82½-9.95	9.86½-9.88½
French Fr.	9½	8.42-8.47	8.44½-8.45½
Swedish Kr	6½	8.56-8.64	8.62¾-8.63¾
Yen	3½	364-370	365½-367½
Austria Sch	4½	26.80-27.25	27.15-27.25
Swiss Fr.	1	3.00-3.04½	3.01½-3.02½

Belgian rate is for convertible francs. Financial franc 61.70-61.80. *Rate for DM on October 13 should have been 3.69-3.70 (close).

FORWARD AGAINST £

One month	% p.a.	Three months	% p.a.
0.57-0.47c pm	3.14	1.70-1.60c pm	3.32
0.65-0.55c pm	3.06	2.00-1.90c pm	3.32
2c pm-1c dis	0.74	3½-2½c pm	3.23
par-15c dis	-1.54	30-15c dis	-1.61
3¾-5¾ore dis	-5.54	8¾-10¾ ore dis	-3.70
3⅛-2⅝pf pm	9.34	8⅝-8⅛ pf pm	9.63
70-170c dis	-16.01	225-475c dis	-13.41
25-125c dis	-6.42	120-220c dis	-4.85
2-5 lire dis	-2.59	6-9 lire dis	-1.84
1½-3½ ore dis	-3.04	6-8 ore dis	-2.64
3¾-2¾c pm	4.61	8-7c pm	3.55
3½-1½ore pm	3.15	7½-5½ ore pm	3.15
3.15-2.80y pm	9.92	9.05-8.80y pm	9.75
16-5 gro pm	4.41	37-27 gro pm	4.71
3¾-2¾c pm	12.90	10⅜-9⅜c pm	13.07

Six-month forward dollar 3.40-3.30c pm. 12-month 5.95-5.85c pm.

THE DOLLAR SPOT

October 16	Day's spread	Close
Canad'n $*	84.61-84.85	84.61-84.64
Guilder	2.0325-2.0550	2.0325-2.0335
Belgian Fr	29.48-29.57	29.53-29.55
Danish Kr	5.1875-5.1990	5.1960-5.1990
D-Mark	1.8660-1.8775	1.8640-1.8670
Port. Esc	45.00-45.30	45.10-45.30
Lira	815.00-819.60	819.30-819.60
Nrwgn. Kr	4.9655-4.9800	4.9750-4.9800
French Fr	4.2690-4.2825	4.2750-4.2775
Swedish Kr	4.3260-4.3385	4.3260-4.3280
Yen	185.85-186.45	185.05-185.25
Austria Sch	13.61-13.68	13.61-13.62
Swiss Fr	1.5290-1.5410	1.5290-1.5305

* U.S. cents per Canadian $.

FORWARD AGAINST $

One month	% p.a.	Three months	% p.a.
0.01cdis-0.02cpm	0.07	0.01cdis-0.02cpm	0.03
0.10-0.30c dis	-1.18	0.30-0.05c pm	0.79
4-9c dis	-2.64	8-13c dis	-1.42
2.60-3.10ore dis	-6.59	7.00-7.50ore dis	-5.59
1.05-1.00pf pm	5.90	3.00-2.97pf pm	6.29
35-180c dis	-28.54	130-500c dis	-27.88
3.25-4.25lire dis	-5.49	10-11.50lire dis	-5.25
2.25-2.75ore dis	-5.43	7.00-7.50ore dis	-5.83
0.25-0.05c pm	0.42	0.25-0.05c pm	0.14
0.30-0.10ore pm	0.55	0.55-0.35ore pm	0.42
1.10-1.00y pm	5.85	3.05-2.95y pm	6.30
4.50-3.50gro pm	3.52	8.75-6.25gro pm	2.20
1.30-1.25c pm	9.04	3.80-3.75c pm	9.57

CURRENCY RATES

October 16	Special Drawing Rights	European Unit of Account
Sterling	0.656336	0.680925
U.S. dollar	1.29738	1.34572
Canadian dollar	1.53428	1.58825
Austrian schilling	17.7806	18.4280
Belgian franc	38.4024	39.8332
Danish krone	6.79935	7.01420
Deutsche Mark	2.42618	2.51616
Guilder	2.64471	2.74268
French franc	5.54889	5.75622
Lira	1063.20	1102.88
Yen	241.572	249.621
Norwegian krone	6.45576	6.69747
Peseta	91.5691	95.0186
Swedish krona	5.62025	5.83722
Swiss franc	1.99148	2.06336

CURRENCY MOVEMENTS

October 16	Bank of England Index	Morgan Guaranty changes %
Sterling	62.17	-41.9
U.S. dollar	82.22	-10.6
Canadian dollar	79.02	-18.2
Austrian schilling	143.76	+17.4
Belgian franc	113.51	+14.6
Danish krone	116.85	+ 5.3
Deutsche Mark	148.16	+40.8
Swiss franc	210.97	+99.7
Guilder	122.69	+19.1
French franc	98.58	- 6.3
Lira	55.12	-48.3
Yen	156.36	+54.5

Based on trade weighted changes from Washington agreement December, 1971 (Bank of England Index=100).

OTHER MARKETS

Oct. 16	£	$		£ Note Rates
Argentina Peso	1,654-1,658	9.4315-833.5	Austria	26.5-27.5
Australia Dollar	1.6580-1.[illegible]30	0.8[illegible]35-[illegible]60	Belgium	61.5-62.5
Finland Markka	7.56-7.57½	3.9670-3.8190	Denmark	10.25-10.35
Brazil Cruzeiro	37.50-38.50	18.88-19.38	France	8.40-8.50
Greek Drachma	70.716-73.448	[illegible]	Germany	3.65-3.75
Hong Kong Dollar	9.34¾-9.36¾	4.7255-4.7275	Italy	160-1650
Iran Rial	1.6 142	70.40-70.65	Japan	371-381
Kuwait Dinar(KD)	0.540-0.550	0.2760-0.2[illegible]	Netherlands	4.00-4.10
Luxembourg Franc	58.30-58.40	29.32-29.36	Norway	9.80-9.90
Malaysia Dollar	4.37¼-4.39¼	2.217-2.219	Portugal	88-104
New Zealand Dollar	1.8510-1.583	0.9[illegible]06-0.9[illegible]40	Spain	141-146
Saudi Arabia Riyal	6.48-6.58	3.2095-3.3105	Switzerland	3.00-3.10
Singapore Dollar	4.42½-4.44½	2.1980-2.18[illegible]	United States	1.97½-1.98¼
South African Rand	1.7022-1.7283	0.8558-0.8690	Yugoslavia	41-45

Rate given for Argentina is free rate

EXCHANGE CROSS RATES

Oct. 16	Pound Sterling	U.S. Dollar	Deutschemark	Japanese Yen	French Franc	Swiss Franc	Dutch Guilder	Italian Lira	Canada Dollar	Belgian Franc
Pound Sterling	1.	1.989	3.688	366.5	8.453	3.024	4.128	1622	2.351	58.33
U.S. Dollar	0.503	1.	1.854	184.3	4.250	1.520	2.125	815.5	1.182	29.34
Deutsche Mark	0.271	0.539	1.	99.39	2.292	0.820	1.12	441.5	0.638	15.82
Japanese Yen 1,000	2.729	5.427	10.06	1000.	23.06	8.247	10.99	4442	6.415	159.2
French Franc 10	1.183	2.353	4.363	433.6	10.	3.576	4.765	1,926	2.781	69.03
Swiss Franc	0.331	0.658	1.220	121.3	2.797	1.	1.333	538.6	0.778	19.31
Dutch Guilder	0.248	0.494	0.916	91.00	2.099	0.750	1.	404.2	0.584	14.49
Italian Lira 1,000	0.614	1.222	2.265	225.1	5.192	1.857	2.474	1000.	1.444	35.84
Canadian Dollar	0.425	0.846	1.568	155.9	3.595	1.286	1.713	692.5	1.	24.82
Belgian Franc 100	1.714	3.409	6.322	628.3	14.49	5.180	6.902	2,790	4.029	10.

EURO-CURRENCY INTEREST RATES

Oct. 16	Sterling	U.S. Dollar	Canadian Dollar	Dutch Guilder	Swiss Franc	West German Mark	French Franc	Italian Lira	Asian $	Japanese Yen
Short term	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 day's notice	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Month	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Three months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Six months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
One year	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

The following nominal rates were quoted for London dollar certificates of deposit: one month 9.20-9.30 per cent; three months 9.70-9.80 per cent; six months 9.90-10.00 per cent; one year 9.90-10.00 per cent.

Long-term Eurodollar deposits: Two years 9⅞-9⅞ per cent; three years 9 11/16-9 15/16 per cent; four years 9 11/16-9 15/16 per cent; five years [illegible] per cent nominal closing rates. Short-term rates are call for sterling, U.S. dollars and Canadian dollars, two-day call for guilders and Swiss francs. Asian rates are closing rates in Singapore.

INTERNATIONAL MONEY MARKET

Canada lifts bank rate

Canada raised its bank rate to a record 10¼ per cent from 9½ per cent yesterday, in the wake of the increase in U.S. interest rates before the weekend. This is the fifth rise this year, and reflects the authorities' concern about the decline in the value of the Canadian dollar against the already weakened U.S. dollar. The latest increase is designed to keep Canadian interest rates competitive and combat any further outflow of funds that could put further pressure on the Canadian currency.

The Governor of the Bank of Canada said that the increase would provide room for necessary adjustments in Canadian interest rates, and that in present circumstances Canada's balance of payments and exchange rate situation requires a widening of the margin between U.S. and Canadian interest rates.

The Royal Bank of Canada and Toronto-Dominion Bank lifted their prime lending rate to 11 per cent from 10¼ per cent from tomorrow, in response to the Bank of Canada's action in raising bank rate by a similar amount to 9¼ per cent. The Royal Bank also increased the interest it pays on non-checking savings accounts to 8½ per cent from 7¾ per cent from November 1.

NEW YORK—Treasury bill rates rose sharply following the increase to a record 8½ per cent from 8 per cent in the Federal Reserve discount rate last Friday. Federal Funds were quoted at 9½ per cent in early trading. Thirteen week Treasury bills rose to 7.90 per cent from 7.83 per cent late Friday; 26-week bills increased to 8.31 per cent from 8.06 per cent; and one-year bills to 8.42 per cent from 8.28 per cent. First National Bank of Chicago and National Bank of Detroit followed other U.S. banks in raising their prime rates to 10 per cent yesterday.

AMSTERDAM—Interbank money market rates declined as the pressure eased on the Dutch guilder following the realignment of the members of the European currency snake. Call money fell to 12-14 per cent from 16-18 per cent; one-month to 10¼-10⅝ per cent from 17-18 per cent; three-month to 9½-9⅞ per cent from 13½-14½ per cent; and six-month to 8½-9 per cent from 10⅞-11¼ per cent.

BRUSSELS—Deposit rates for the Belgian franc (commercial) were unchanged from 8⅞-8¾ per cent for one-month to 8⅞-8⅞ per cent for 12-month.

PARIS—Day-to-day money eased to 6⅞ per cent from 7 per cent. One-month funds were quoted at 7⅛ per cent, compared with 7 1/16-7 3/16 per cent on Friday; three-month were unchanged at 7⅞-7⅜ per cent; six-month rose to 7⅞-7⅞ per cent from 7 11/16-7 13/16 per cent; and 12-month were unchanged at 8 5/16-8 7/16 per cent.

HONG KONG—Chinese communist banks raised interest rates on time deposits in the Chinese yuan. Interest rates for three-month deposits have been raised to 4 per cent from 3 per cent; six-month to 4¾ per cent from 4 per cent; one-year to 6 per cent from 5 per cent; two-year to 6½ per cent from 5½ per cent; and three-year to 7 per cent from 6 per cent.

SINGAPORE—Bank of Negara Indonesia followed other banks in raising its prime lending rate by ¼ per cent to 7½ per cent, while Bank Nationale de Paris and Morgan Guaranty Trust Co. of New York made similar moves.

GOLD

Weaker tendency

Gold lost $½ an ounce in the London bullion market yesterday to close at $224-224½. Activity was kept at a minimum, with the lack of any clear trend reflecting recent activity within the currency market. The metal opened at $223¾-224¼ and was fixed during the morning at $224.30 before easing slightly to be fixed in the afternoon at $223.40.

	Oct. 16	Oct. 13
Gold Bullion (a fine ounce)		
Close	$224-224½	$224¾-225¼
Opening	$223¾-224¼	$225¼-224¾
Morning fixing	$224.30 (£113.368)	$225.05 (£113.147)
Afternoon fixing	$223.40 (£112.726)	$224.50 (£113.201)
Gold Coins domestically		
Krugerrand	$232-234 (£116¾-117¾)	$231-233 (£116¼-117¼)
New Sovereigns	$65¼-65¾	$65¼-65¾
	(£32-33)	(£32-33)
Old Sovereigns	$62-64	$61¼-62¾
	(£31¼-32¼)	(£31-32)
Gold Coins Internationally	—	—
Krugerrand	$230-232	$231-233
	(£115¾-116¾)	(£116¼-117¼)
New Sovereigns	$62-64	[illegible]
	(£[illegible])	(£[illegible])
Old Sovereigns	$62-64	[illegible]
	(£[illegible])	(£[illegible])
$20 Eagles	$[illegible]	$[illegible]
$10 Eagles	$159-164	$158-164
$5 Eagles	$108-113	$108-116

UK MONEY MARKET

Full credit supply

Bank of England Minimum Lending Rate 10 per cent (since June, 1978)

Day-to-day credit was in good supply in the London money market yesterday and the authorities absorbed surplus funds by selling a large amount of Treasury bills to the discount houses and banks.

Banks brought forward slight surplus balances from Friday, and the market was also helped by substantial net maturing Treasury bills. On the other hand sizeable revenue payments to the Exchequer outweighed Government disbursements, even though local authorities received £140m rate support grant.

Discount houses paid up to 8¾ per cent for secured call loans and closing balances were taken at 8-8½ per cent. In the interbank market overnight loans opened at 9¼-9½ per cent, and fell to 8¼-8½ per cent, before closing at 11 per cent.

LONDON MONEY RATES

Oct. 16 1978	Sterling Certificate of deposit	Interbank	Local Authority deposits	Local Auth. negotiable bonds	Finance House Deposits	Company Deposits	Discount market deposit	Treasury Bills ♦	Eligible Bank Bills ♦	Fine Trade Bills ♦
Overnight	—	8⅛-11	—	—	—	8¾-9	8-8¾	—	—	—
2 days notice	—		9¼-9½	—	—			—	—	—
7 days or	—		—	—	—	9½		—	—	—
7 days notice	—	8⅞-9⅝	9½-9⅝	—	10		8½-8⅞			—
One month	9⅞-9½	9⅝-10	9⅞-9⅞	9⅞-10⅛	10⅜	10	9⅛	9½-9⅝	9¾-9⅞	10⅜
Two months	10¼-10⅛	10⅛-10¾	—	10¼-10⅛	10¾		9⅝	9⅝-9⅞	10⅛	10⅝
Three months	10⅛-10⅝	10⅛-10⅞	10⅝-10⅛	10⅛-10¾	11⅛	10⅞	9⅝-9⅞	9⅞-10¼	10⅛	10¾
Six months	11⅛-10⅞	11-11¼	10⅞	10⅝-11	11⅜	—			11	11
Nine months	11-10¾	10⅞-11¼	—	10⅞-11⅛	11⅛	—	—	—	—	—
One year	11-10¾	10⅞-11¼	10⅛-10⅞	10¾-11¼	11⅛	—	—	—	—	—
Two years			11⅛-11⅞			—			—	—

Local authority and finance houses seven days' notice, others seven days' fixed. * Longer term local authority mortgage rates nominally three years 12-12⅛ per cent; four years 12-12⅛ per cent; five years 12¼-12½ per cent. ♦ Bank bill rates in table are buying rates for prime paper. Buying rate for four-month bank bills 10⅛ per cent; four-month trade bills 10⅞ per cent.

Approximate selling rates for one-month Treasury bills 9⅝-9⅞ per cent; and two-month 9⅞-9 15/16 per cent; three month 9 15/16 per cent. Approximate selling rate for one-month bank bills 9⅝-9 15/16 per cent; two-month 10-10 1/16 per cent; and three-month 10 5/16 per cent. One-month trade bills 10⅛ per cent; two-month 10⅞ per cent; and also three-month 10⅞ per cent.

Finance House Base Rates (published by the Finance House Association) 9½ per cent from October 1 1978. Clearing Bank Deposit Rates (for small sums at seven days' notice) 6-7 per cent. Clearing Bank Base Rates for lending 10 per cent. Treasury Bills: Average tender rates of discount 9.8303 per cent.

MONEY RATES

NEW YORK

Prime Rate	10
Fed Funds	8.9125
Treasury Bills (13-week)	7.94
Treasury Bills (26-week)	8.51

GERMANY

Discount Rate	3.45
Overnight	3.15
One month	3.55
Three months	4.00
Six months	4.05

FRANCE

Discount Rate	9.5
Overnight	6.875
One month	7.125
Three months	7.4375
Six months	7.8125

JAPAN

Discount Rate	3.5
Call (Unconditional)	4.375
Bills Discount Rate	4.625

World Value of the Pound

The table below gives the latest available rates of exchange for the pound against various currencies on October 16, 1978. In some cases rates are nominal. Market rates are the average of buying and selling rates except where they are shown to be otherwise. In some cases market rates have been calculated from those of foreign currencies to which they are tied.

Exchange in the UK and most of the countries listed is officially controlled and the rates shown should not be taken as being applicable to any particular transaction without reference to an authorised dealer.

Abbreviations: (S) member of the sterling area other than Scheduled Territories; (k) Scheduled Territory; (o) official rate; (F) free rate; (T) tourist rate; (n.c.) non-commercial rate; (n.a.) not available; (A) approximate rate no direct quotation available; (sg) selling rate; (bg) buying rate; (nom.) nominal; (exC) exchange certificate rate; (P) based on U.S. dollar parities and going sterling dollar rate; (Bk) bankers' rate; (Bas) basic rate; (cm) commercial rate; (cn) convertible rate; (fn) financial rate.

Sharp fluctuations have been seen lately in the foreign exchange market. Rates in the table below are not in all cases closing rates on the dates shown.

Place and Local Unit	Value of £ Sterling	Place and Local Unit	Value of £ Sterling	Place and Local Unit	Value of £ Sterling	Place and Local Unit	Value of £ Sterling
Afghanistan Afghani	75.00	Ecuador Sucre	(O) 49.51 (F) 52.95	Liechtenstein Swiss Franc	3.0225	Romania Leu	(cm) 8.49 (nc) T22.79
Albania Lek	11.689	Egypt Egyptian £	(O) 0.7600 (T) 1.3600	Luxembourg Lux Franc	58.56	Rwanda Rwanda Franc	180.87
Algeria Dinar	7.8913	Ethiopia Ethiopian Birr	(P) 4.1219	Macao Pataca	10.1250	St. Christopher (S) E. Caribbean $	5.375
Andorra French Franc / Spanish Peseta	8.4525 / 140.20	Eq'l Guinea Peseta	146.20	Madeira Portug'se Escudo	89.60	St. Helena St. Helena £	1.0
Angola Kwanza	n.a.	Falkland Is. (S) Falkland Is. £	1.0	Malagasy Rp. MG Franc	422½	St. Lucia E. Caribbean $	5.375
Antigua (S) E. Caribbean $	5.375	[illegible]	[illegible]	Malawi (S) Kwacha	n.a.	St. Pierre C.F.A. Franc	422½
Argentina Ar. Peso Free Rate	1.661	[illegible]	[illegible]	Malaysia (S) Ringgit	4.3825	St. Vincent (S) E. Caribbean $	5.375
[illegible]	[illegible]	[illegible]	[illegible]	Maldive Is. (S) Mal Rupee	7.8167	[illegible]	[illegible]

* That part of the French community in Africa formerly part of French West Africa or French Equatorial Africa. † Rupees per pound. ‡ General rates of oil and iron exports [illegible]. § Based on cross rates against Russian rouble. ¶ Rate is the Transfer market (controlled). ** Rate is now based on 2 Barbados $ to the dollar. †† Now one official rate.

AMERICAN NEWS

United Tech. in earnings upswing

By Our Own Correspondent

NEW YORK, Oct. 16.

UNITED TECHNOLOGIES, the diversified aerospace and industrial products group currently in the process of a $1bn takeover bid for Carrier Corporation, today announced a 24 per cent increase in third quarter income.

Earnings for the period increased from $50.6m, or $1.09 a share, to $62.6m, or $1.20 a share.

Sales over the same period rose 15 per cent to $1.5bn.

For the first nine months of the year, net income is $1m, or $3.56 a share, up from $146.4m, or $3.18 a share, a rise of 18 per cent.

Sales for the nine months rose 11 per cent to $4.6bn.

The company says that although the third quarter figures include the results of Ambac Industries, which was merged into the parent in July, Ambac did not have a significant impact on the third quarter or nine months results.

The company's business order backlog increased by 35 per cent, it said, to $7.3bn, compared with $5.4bn at the same stage last year.

Burlington Northern recovery

By Our Financial Staff

A RECOVERY at Burlington Northern, the transportation and natural resources company, has produced third quarter profits per share of $1.91 against a loss of $0.29 in the same period last year. A net profit of $25.9m was returned for the quarter against a loss of $1.79 a year ago, with sales up to $609.1m against $721.8m.

Over the nine month period profits per share have risen to $7.07 against $4.28, with net profits up to $94.45m from $56.54m. Sales have increased only marginally to $1.69bn against $1.65bn.

Burlington's improved performance follows the agreement earlier this year to acquire Hart Motor Express of St. Jaul, and to merge it into its own trucking subsidiary, BN Transport. The company also runs a transcontinental railway and a freight forwarding service.

American Airlines well ahead after nine months

BY JOHN WYLES

NEW YORK, Oct. 16

THE extraordinary profits surge enjoyed by the U.S. airline industry this year has continued during the third quarter, on the evidence of a 71 per cent increase in net income announced by American Airlines today.

As the first airline to report on the quarter, American's success is unlikely to have been atypical. With most of the industry reporting revenue passenger miles more than 20 per cent higher than in 1977, airlines like Delta and Continental which have more modern and more efficient fleets may have fared even better.

American's load factor—the proportion of total seats filled—was around 6 per cent higher during the quarter than in the same period last year, and the impact on profits has been dramatic. While revenues from the quarter rose 18 per cent from $654.9m to $772.4m. Net income leapt 71 per cent to $90.1m (or $3.04 per share from $52.7m or $1.74 per share). As a result, nine months earnings have risen from $82.5m or $2.67 a share to $127.08m or $4.12 a share. Revenues rose 17 per cent from $1.76bn to $2.07bn.

American's results confirm that 1978 profits for the 10 trunk airlines plus Pan American world Airways will substantially exceed last year's record $630m. Many analysts would not be surprised to see aggregate net income of more than $1bn, which is one reason why airline stocks have outperformed the stock market for much of the year. Profits of the quality reported by American will put the industry in a much stronger position than anticipated to modernise its fleets and thereby increase its efficiency. U.S. Airlines are expected to spend $22bn by 1984 on fleet expansion and re-equipment, and the total is expected to exceed $60bn by 1990.

Sharp advance by Signal group

NEW YORK, Oct. 16.

SHARPLY HIGHER third quarter results are reported by the Signal Companies, the diversified maker of trucks and aerospace products. Net earnings for the quarter rose from $26.7m to $41.4m on sales of $868m (compared with $724.8m in the corresponding period).

Earnings for the nine-month period exceeded those for the entire 1977 fiscal year. The present nine-month period had earnings of $117.4m compared with $72.7m for the same 1977 period. Total earnings for 1977 stood at $101.5m.

Sales for the third quarter were $868m compared with $724.8m for the corresponding quarter, whereas per share earnings stood at $2.15 compared with $1.35.

The nine-month period saw a per share earning of $6.10 compared with $3.66 in the same period in 1977. Sales increased to $2.66bn from $2.2bn for the nine-month period.

The company said the markets in which it is involved showed no signs of weakening. The largest contributor to the nine-month returns was the Mack Trucks division, which earned profits of $15.9m in the quarter compared with $10.2m in the 1977 third quarter.

Agencies.

CPC International increase

BY OUR FINANCIAL STAFF

CPC INTERNATIONAL, the food and industrial products group, announced net third quarter earnings of $1.61 a share against $1.39 in the previous year. Net income rose to $38.13m against $32.91m, while sales went up to $825.5m compared with $731.9m in 1977.

Over the nine-month period, net earnings per share have risen to $4.13 against $3.87, while income rose to $98.21m against $91.89m on sales of $2.36bn against $2.13bn.

The company, which has substantial interests in Europe, said that currency exchange gains totalled $3.1m during the last nine months against improvements of $2.2m for the same period a year ago.

Commenting on the results, Mr. James W. McKee, president and chief executive officer, said current indications were that the full year's results would show improvements over 1977 in line with the trends indicated by the outcome of the first nine months.

CPC achieved a net income last year of $132.9m on sales of $2.87m. The company is best known for its Best Foods subsidiary in the U.S., although its non-food activities account for about 30 per cent of its business. Among its main products are Knorr soups and Mazola corn oil.

The group has manufacturing and restaurant activities in many European countries, including the UK, Germany, France, Italy, Austria, Denmark, Sweden and Switzerland.

Its European sales last year amounted to $1.3bn, with net income rising by 40 per cent to $52.8m.

Studebaker-Worthington

Studebaker-Worthington, the transport equipment and electronics manufacturer, made net profit for the third quarter of $2.44 a share compared with $1.72, Agencies report from New York. Total net was $17m against net profit from continuing operations of $13.9m. In last year's third quarter, a $1.19m gain from discontinued operations made the final net profit figure $15.1m or $1.87 a share. Sales increased to $343.9m from $277.6m.

Cleveland Cliffs to buy drilling contractor

By David Lascelles

NEW YORK, Oct. 16.

CLEVELAND CLIFFS Iron Company, one of the country's largest iron ore producers, has embarked on a major diversification programme into the field of oil and gas drilling.

In a deal worth about $60m, the company is to buy up Tiger Oil, a largely privately-owned oil and gas contract drilling company based in Houston. The deal involves the purchase of 4.55m Tiger shares from Mr. Edward Davis, owner of 95 per cent of the company, for $57m, or $12.53 a share. The remaining 250,000 shares would be bought from minority shareholders at the same price.

Mr. Samuel Scovil, president of Cleveland Cliffs, said the proposed acquisition "represents a major step in our diversification efforts. We are continuing to investigate other areas, particularly in the energy fields as an extension and potential diversification of the company."

Cleveland Cliffs, based in Ohio, manages 13 per cent of North American iron ore production, and is also involved in Australian ore. The company's other interests include Great Lakes cargo transport, forestry product and mineral exploration.

Tiger Oil is engaged in U.S. oil and gas exploration and owns a number of land and barge drilling rigs.

Price-fixing fines

A U.S. judge has fined four corrugated-box manufacturers a total of more than $1.2m after they pleaded no contest to charges of price-fixing conspiracy, AP-DJ reports from Houston. The companies involved were International Paper, Hoerner Waldorf Corporation, Alton Box Board Company and Consolidated Packaging Corporation. The companies are among nine named in a felony indictment. An additional five companies were indicted on similar misdemeanour charges. Stone Container and Boise Cascade earlier pleaded no contest to misdemeanour charges and have been fined the maximum of $50,000.

Third quarter rise at Manufacturers Hanover

BY STEWART FLEMING

NEW YORK, Oct. [illegible]

SPURRED ON by a marked increase in domestic business loans and widening interest margins, Manufacturers Hanover, the fourth largest U.S. commercial bank, today reported a 21.8 per cent increase in after-tax operating earnings for the third quarter.

The sharp rise is in line with increases being reported by other major banks, although Manufacturers Hanover is placing considerably more emphasis on its U.S. business loan volume as a factor in the profits increase than most other New York banks have been doing.

For thet quarter, the bank's after-tax operating earnings increased to $47.6m or $1.46 a share from $39.1m or $1.27 a share.

For the first nine months of the year, after-tax operating earnings are $136.2m, or $4.19 a share, a rise of 15.8 per cent over the $177.7m earned in the same period of 1977.

The bank says that the net interest income it earned improved because the rate earned on domestic loans and securities increased more than the average cost of all funds, largely because of the high percentage of interest-bearing deposits in the banking subsidiaries.

This, combined with the continued pick-up in overseas loan volume and the marked increase in domestic business loans, helped to raise third quarter net interest income to $236m from $199.9m in the same period.

The bank reported an increase in the third quarter provision for possible loan losses from $17.5m to $22.1m, although for the first nine months of the year, loan loss provisions are down from $62.3m to $55.4m, a move in line with the general trend [illegible] banking industry over the two years.

Meanwhile, Continental [illegible] Corporation announced [illegible] quarter results of operating profits at $1.05 against $[illegible] a share. Total operating profits of $41.3m compare [illegible] $32.6m. After securities transactions profit per share of [illegible] compare with 92 cents and net of $40.8m with $32[illegible].

For the nine months [illegible] operating share profits [illegible] compare with $2.89 per [illegible] Operating net of $121.4m [illegible] pares with $102.6m. After securities transactions profits [illegible] share of $3.25 compare [illegible] and total net of $120[illegible] £102.4m.

Loans of $16.5bn [illegible] from $13.4bn, deposits of [illegible] and $17.15bn and [illegible] $27.3bn from $24.13bn.

Pemex decides to build port

BY WILLIAM CHISLETT

MEXICO CITY, Oct. [illegible]

PETROLEOS MEXICANOS (Pemex), the State-owned oil monopoly, is expanding so rapidly that it has decided to build a new port in order to cope with its increased export orders.

Up until now, all shipments of Pemex's crude oil exports—running at around 500,000 barrels a day this year compared to an average of 202,000 b/d last year — have left from the port of Pajaritos. But the port is finding it increasingly difficult to manoeuvre the rising volume of exports expected to reach one million b/d by 1980. As a result, Pemex has decided to build a new port at Dos Bocas, a few kilometres down the south east coast from Pajaritos in the state of Tobasco where most of Mexico's current 1.4m b/d are produced.

The Pajaritos port was enlarged not long ago but is still too narrow, only allowing entry to small and medium ships up to 60,000 tonnes. Last month there were technical difficulties loading on 300,000 barrels crude for Spain because of size and depth of the port.

According to Pemex, Pa[illegible] will be unable to deal with increased trade before 1982. Dos Bocas port, which [illegible] chosen from three other sites, the most suitable because it is conveniently near the [illegible] shore oil fields and also [illegible] offshore wells which have [illegible] discovered and will be [illegible] in the near future.

NY insurance plan may be speeded [illegible]

BY OUR OWN CORRESPONDENT

NEW YORK, Oct. 16

ATTEMPTS ARE being made to bring forward the opening of New York's insurance exchange by several months to January 1 next year. The exchange, which is seen as New York's answer to Lloyd's of London, was originally expected to start up early next summer.

The prime mover is New York's Insurance Superintendent, Mr. Albert B. Lewis, who stated in an interview with the Wall Street Journal today that the drafting of bye-laws has gone so well that he plans to ask the state legislature to by-pass the normal 45-day waiting period and give the immediate go-ahead when the laws are presented on January 1.

The state legislature does not have to approve the byelaws, but it would normally have 45 days to raise objections to them.

The bye-laws are being drawn up by a 13-strong committee chaired by Mr. Lewis and consisting of representatives of the insurance industry and specialists on insurance affairs.

According to Mr. Lewis, $3.5m have already been pledged to capitalise the exchange, which, it is estimated, will need about $60m to get going. Participants in syndicates will be required [illegible] put up $100,000 each in [illegible] bonds. Due to resistance [illegible] large broker participation, [illegible] laws forbid brokers to own [illegible] than 20 per cent of a syndicate.

Mr. Lewis said: "A [illegible] industry is being formed [illegible] The companies are ready [illegible] even the ones that initially opposed the idea of the exchange."

However, other members of the drafting committee [illegible] believed to be less [illegible] Several matters remain to be resolved, and each could [illegible] a stumbling block.

SOCAL-AMAX BID

Wall Street waiting for the next move

BY DAVID LASCELLES, RECENTLY IN SAN FRANCISCO

WALL STREET has seldom been kept on such tenterhooks as it has by Standard Oil of California (Socal). It is now more than six weeks since the country's fourth largest oil company made a dramatic $1.9bn takeover offer for Amax, a major minerals and mining concern, only to be turned down flat. Since then, everyone has been waiting with bated breath for what happens next. But in vain.

At the company's headquarters in San Francisco's bustling Market Street district, Mr. Howard Bell, financial vice-president, receives a constant stream of telephone calls from Wall Street dealers keen for a hint or scrap of information. But he tells them all the same thing—no news. Socal is examining its options and will make an announcement when the time is ripe.

Socal's bid, which would have been the second largest in U.S. history, was aimed at increasing the company's existing 20 per cent stake in Amax to 100 per cent. Socal bought this stake in 1975 "for investment purposes only." But Amax's board turned the offer down within a matter of hours, mainly on the grounds that it would create anti-trust problems.

Socal retorted that there were no anti-trust restraints. But instead of pursuing its offer by sweetening it or appealing directly to the shareholders, Socal simply expressed regret that agreement could not be reached, and withdrew from the scene.

Since then, there have been plenty of rumours of pending developments, based on the assumption that neither Socal nor Amax wants the matter to rest there, though it is still not clear whether Socal badly misjudged its move or is playing a clever waiting game. According to one company source, the episode "has made our directors very unhappy," which suggests that the first view may be the correct one.

But another reason for anticipating action is Socal's declared intention to build up its non-oil operations as part of a long-term diversification programme. Though the company has large and expanding oil interests (for instance, it is active in the North Sea under its trade name Chevron) it shares the oil industry's common desire to plan, now, for the day when the oil runs out.

As Mr. Bell explains it, Socal expects oil production to peak in the 1990s, so it has launched a plan to increase its non-oil operations from the present-day 5 per cent to 30-40 per cent by the year 2000. This projection assumes that there will be no more 1bn barrels-a-day oilfield discoveries, but that Socal will maintain its share of whatever is discovered.

Mr. Bell said that Socal was investigating different energy sources, though none could ever become as big as oil and for that reason held out no prospect of replacing it. Ten years ago Socal set up a "minerals staff" which is developing uranium and geothermal energy (it is currently negotiating with a group of Southern California utilities to exploit some hot springs in Imperial Valley). Socal also looked at fuels like tar sands and shale, but concluded that with the extent of deposits fairly well-known and ownership established, the openings were limited.

Looking further afield, Mr. Bell said: "We concluded that our technology and skills lay in the area of natural resources, broadly defined to include mining, forest products and agriculture." This conclusion lay behind Socal's decision to buy its stake in Amax. "We felt we could bring something to that company," Mr. Bell said, "and this was confirmed by what we saw."

Socal's decision to go for outright ownership of Amax was dictated to a large extent by its tactical options. Mr. Bell said Socal could have gone for diversification internally, by developing new divisions along the lines of Exxon, the largest oil company, which has entered fields like electronics on its own. But Socal's biggest experiment in this area, chemicals, has not been a happy one ("lots of ups and downs") and the company was not keen to give it another try.

A second option, putting seed capital into new ventures, was also considered risky. This left the option of outright purchases, with the advantage of speedy and certain diversification, though as Mr. Bell pointed out, there are not all that many companies that are both in the right business and big enough to satisfy the appetite of a $20bn-a-year giant like Socal. "The company we bought would probably have to be in the Fortune 500," he said.

The choice is narrowed further by the fact that while Socal is prepared to take on a loss-making concern, it would want to be able to transform it into a profitable one in two to four years. All these considerations, plus the fact that the other oil majors are on the prowl for natural resource companies, point to a tight market and add to the impression that Socal will have another go at Amax.

Finance for the initial Amax offer, had it been successful, would have been obtained in one of two ways, Mr. Bell explained. With its healthy cash flow, Socal might have been able to pay for the acquisition out of the till. Otherwise, it would have borrowed short term to tide it over the troughs in revenues that characterise a business like Socal's, where dues to the oil producing countries are paid in hefty monthly instalments.

Whatever the uncertainties over Amax, though, Mr. Bell described his company's mood as bullish. It has recently chalked up exploration success in the Middle East, Indonesia, Europe, and several areas of the U.S. Although agreeing that current production capacity is excessive, Mr. Bell says this is a short-term problem only, and while the price of oil may not rise faster than inflation in the next five years, it should register some real increases—possibly an average 3 per cent a year—after that.

EUROBONDS

Lighter calendar for DM issues

BY FRANCIS GHILÈS

THE CALENDAR of new issues of Deutschemark denominated international bonds will be lower in the month from tomorrow than during the 30 days which have just ended. At its meeting last Friday in Frankfurt, the Capital Markets sub-committee decided on a calendar of DM 475m to which has to be added a maximum of DM 770m of issues for international borrowers which are not technically included in the calendar.

From the first figure of DM 475m has to be subtracted the DM 100m which Commerzbank is expected to arrange for New Zealand on November 2. This issue was included in last month's calendar and was put off by the lead manager at the last minute. Of the remaining DM 375m, a DM 75m for the City of Copenhagen is expected from Deutsche Bank today. This will be followed by the New Zealand issue, then by a private placement for a Japanese borrower through Westdeutsche Landesbank (November 7), a DM 150m for Finland through Dresdner Bank (November 6), a DM 50m for an unknown industrial address through Westdeutsche Landesbank (November 9), and the month will be wound up by a DM 150m for a South African borrower through BHF Bank (November 10).

Of the DM 770m for international organisations two will be arranged by Deutsche Bank, DM 150m for ECSC (November 23) and a provisional DM 500m for the World Bank in early November. On October 27, BHF Bank is expected to announce DM 120m for the Council of Europe. It appears that no firm date has been set for the World Bank issue and that whether it comes at all will depend on the state of the market.

The sub-committee did not know of the coming revaluation of the Deutschemark when it met last week and the decision to allow for a lightening of the new issue calendar was taken because of the weight of new paper in the market which it was feared could eventually unsettle prices seriously.

Prices in the secondary sector were off by about ½ per cent yesterday in thin trading: mostly the result of the very heavy amount of paper currently on offer. The revaluation of the Deutschemark had no perceptible effect. Dealers said that money continued to flow into DM bonds from abroad.

The second franc-denominated international bond since this sector of hte market reopened last month is expected to be launched shortly, probably with the Banque de l'Union Européenne as lead manager. The name of the borrower is not yet known.

The French Treasury decide who the borrower shall be, which bank will manage the issue, and the date of the launching. When the market reopened in September the Treasury told French banks that the calendar of new issues would allow for one issue a month with international organisations and industrial names alternating. The French franc sector has been very stable for the past ten days with the only issue floated since the reopening, the EIB bond, being quoted at a steady 98¼.

FT INTERNATIONAL BOND SERVICE

The list shows the 200 latest international bond issues for which an adequate secondary market exists. For further details of these or other bonds see the complete list of Eurobond prices published on the second Monday of each month.

U.S. DOLLAR STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Aga Akt. 9¼ 87	25	97¼	97⅞	−0¼	−0¼	9.66
Australia 8 82	350	96	96½	−0¼	−0¼	9.29
Australia 8.45 83	175	97⅞	98¼	−0¼	−0¼	9.15
Australia 9¼ 93	75	99⅞	100⅜	+0	+0¼	9.31
Beatrice Foods 7⅞ 83	100	95	95½	−0¼	−0¼	9.05
CECA 8¾ 87	50	96¼	97	−0¼	−0¼	9.30
CECA 9 93	25	97⅞	98⅜	−0¼	−0¼	9.10
CECA 9¼ 98	25	100	100½	+0	−0¼	9.21
CNT 9 93	75	98¼	98⅞	+0	−0¼	9.19
Canada 8 83	250	96	96½	−0¼	−0¼	9.24
Canada 8.20 85	250	97	97½	+0¼	+0⅞	8.93
Canada 8⅞ 98	250	95⅞	95⅞	−0¼	−0¼	9.32
Canadair 8⅞ 83	70	96⅞	97¼	−0¼	−0¼	9.30
Dominion Brdg. Co. 9 86	25	95¼	95⅞	−0¼	−0¼	9.87
EIB 8¼ 85	100	97⅞	98¼	−0¼	−0¼	9.27
EIB 9⅛ 86	75	98½	99⅛	−0¼	−0¼	9.28
EIB 9¼ 93	100	98¼	99	+0¼	−0¼	9.27
EIB 9⅝ 98	125	98⅞	99½	−0¼	−0⅛	9.76
EIB 9¾ 98	100	99⅞	99⅞	+0⅛	+0	9.82
Elsam Jutland 9 85	25	96⅞	97⅜	+0	−0¼	9.60
Eksportfinans 9 86	50	98	98½	−0¼	−0⅛	9.32
Export Develpmnt. 8.6 83	125	98⅛	98⅞	−0¼	+0	9.15
Finland 8⅞ 83	100	98⅛	98⅞	−0¼	−0¼	9.32
Finland 9 88	100	98	98½	+0¼	+0¼	9.09
Hospital O/S 9 83	25	97⅞	98¼	−0¼	+0⅞	9.55
I.C. Industries 9 83	35	96⅛	97⅛	−0¼	−1	9.62
Itel Finance 9¾ 88	25	97⅞	98¼	−0¼	−1	10.09
Itel Finance 9¼ 90	20	97¼	97⅞	−0⅜	−1¼	10.37
Ito-Yokado 9¼ 83	20	99⅞	100⅛	−0¼	−0¼	9.36
J. C. Penney 8¾ 83	100	97⅞	98⅛	−0¼	+0¼	9.05
Mac Bloedel 9¼ 93	50	97⅞	98¼	+0¼	−0¼	9.48
NZ Dev. Fin. 8¼ 83	20	95½	95⅞	−0¼	−0¼	9.34
NZ Dev. Fin. 8⅞ 83	20	95¼	95⅞	−0¼	−0¼	9.30
Nat. West. 9 86	75	99⅜	100¼	−0¼	−0⅜	9.01
Newfoundland 9¼ 90	50	98¼	99¼	−0¼	−0¼	9.38
Nord Inv. Bk. 8⅞ 88	25	97¼	97⅞	+0	−0¼	9.16
Norges Komm. 9¼ 99	75	98⅛	98⅞	−0¼	+0	9.49
Norway 7¾ 83	250	94⅞	95⅜	−0¼	−0¼	9.21
Norway 8¼ 83	125	96¼	97	+0¼	−0¼	9.14
Norway 8¾ 83	150	98⅛	99¼	−0¼	−0¼	9.25
Occidental 8¾ 85	75	95⅛	95⅞	−0¼	−0¼	9.78
Ont. Hydro 8¾ 85	125	96¼	96⅞	+0	−0¼	9.24
Quebec Hydro 9¼ 93	50	97⅞	98⅜	−0⅛	−0⅛	9.60
Sweden 9¼ 98	125	99¼	100	+0	+0	9.51
United Kingdom 9¼ 83	200	97⅞	98¼	+0	−0¼	9.08
United Kingdom 8¾ 93	150	98¼	98½	−0¼	+0	9.28

DEUTSCHE MARK STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Asian Develop. Bk. 5¾ 88	100	†96¼	96⅞	−0¼	−0¼	6.00
Australia 6 88	250	101⅞	102⅞	+0⅛	+0¼	5.71
CFE Mexico 6¾ 88	150	97⅞	98⅜	+0	−0⅛	7.00
Canada 4¾ 83	600	98	98½	+0	−0¼	5.38
Chase Manhattan O/S 6 93	100	101⅛	101⅞	+0	+0¼	5.84
Commerzbank Int. WW 3¼	100	†107	108	+1¼	+1⅛	2.62
Commerzbank Int. XW 3¼	100	†83¼	83⅞	−1¼	−0⅞	5.76
Council of Europe 6¼	100	99⅞	100¼	−0⅛	−0⅞	6.10
EIB 5¾ 90	250	93¼	94	−0⅛	+0	6.02
EIB 6 90	300	98⅛	99¼	−0¼	−0¼	6.12
Elektrobras-Brazil 6¾	150	98	98½	+0	−0¼	7.05
Elf Aquitaine 5¾ 88	100	94¾	95¼	−0¼	−0¼	5.94
IBJ 5 84	100	100	100⅛	+0¼	+0¼	4.91
Kobe, City of 5⅞ 86	100	101⅛	102	−0¼	−0¼	5.46
Light Servicos de Elet	150	98	98⅞	−0¼	−0¼	7.05
Mexico 6 85	200	†97⅛	97⅞	+0¼	−0⅜	6.48
Mitsubishi Petro 5¾ 83	100	102⅛	103	−0⅛	+0	5.26
Nippon Steel 5¾ 85	100	102⅞	102⅞	+0⅛	+0	5.28
Norges Komm 6 90	100	100⅞	101⅛	+0	+0¼	5.89
Norway 4¼ 83	250	96⅞	97⅛	−0⅛	−0⅜	5.11
Norwegian Ind. Bk. 6 90	125	100¼	100⅞	+0⅛	+0	5.93
Petroleo Brazil 7 88	100	99⅞	99⅞	−0⅞	−0¼	7.07
Philippines 6⅞ 95	100	96¼	96⅞	+0	−0⅛	7.47
PK Banken 5¾ 84	100	96¼	96⅞	+0	−0¼	6.26
Quebec, Province of 6 90	150	97⅞	98⅛	+0¼	+0	6.24
Rautaruukki Oy 5¾ 85	50	95⅞	96¼	+0	−0¼	6.34
Ricoh 5¼ 83	30	100¼	100⅞	+0¼	+0	5.10
Spain 6 88	200	96⅞	97½	+0	+0¼	6.44
Statoil 6 88	150	100½	101	+0¼	+0¼	5.90
Tauernautobahn 5¾ 93	70	†98¼	98⅞	+0	−0¼	5.65
Trondheim, City of 5¾	35	97½	97⅞	+0	+0	6.10
UDS Group 5¾ 83	65	97⅛	98	+0	−0¼	6.30
Venezuela 6 88	250	95¼	96¼	+0	−0¼	6.58

SWISS FRANC STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Acesa 5¼ 88	40	104½	104¾	+0¼	+0⅞	4.65
Arlberg Tunnel 4 93	40	100	100½	+0¼	+0⅞	3.99
Asea 3¾ 93	100	95	95½	−0⅛	+0¼	4.20
Chase Manhattan 4 93	70	102⅛	103	+0¼	+0⅞	3.74
CVRD 4¾ 90	50	97¼	97⅞	+0¼	+0¼	5.05
Council of Europe 4¼	65	102⅛	103	−0¼	+1¼	4.23
Bankamerica 3¾ 93	80	100⅜	101	+0	+0¼	3.67
BNDE 5 88	75	101⅛	102⅛	+0⅛	+0⅛	4.84
Denmark 4¼ 88	100	104⅛	104⅞	+0	+0⅞	4.03
Denmark-Mortgage Bank	80	102⅛	102⅞	+0⅛	+0¼	4.21
EIB 4¼ 93	100	102⅛	102⅞	+0⅞	+1¼	4.03
Euratom 4¼ 93	80	100⅛	100⅞	−0¼	+0¼	4.19
F. L. Smidth 4¾ 89	25	100⅜	100⅞	−0¼	+0⅞	4.65
Finland 4¾ 93	80	101⅞	102⅛	+0¼	+1⅛	4.37
GZB 4¾ 93	100	103	103⅞	+0¼	+0¼	4.21
Hilti-Liechtenstein 4¼	25	103⅞	104	+0¼	+0¼	3.89
ICI Fin. NV 4¼ 93	100	102⅛	103¼	−0¼	+0¼	3.90
Imatran Voima 4 93	80	96⅞	96⅞	+0	+0⅞	4.32
Manitoba 4 93	100	102⅛	102⅞	+0⅞	+1⅛	3.77
New Brunswick EPC 3¾	100	98	98½	+0¼	+1	3.92
Newag 4 93	70	100½	100⅞	+0⅞	+0¼	3.96
Norges Komm 4¼ 90	100	102⅞	102⅞	+0	+0¼	3.96
OKB 4 93	80	100	100¼	+0	+0¼	3.99
Oy Nokia 5 90	20	101⅛	101⅞	+0⅛	+0¼	4.88
Quebec Hydro 3¾ 93	130	97⅞	97⅞	+0¼	+0⅞	3.98
Safe 4¾ 93	30	101⅛	101⅞	−0¼	+0¼	4.12
Seas 4¾ 98	15	100⅜	100⅞	+0	+0	4.42
Voest-Alpine 4¾ 93	100	102	102⅛	+0	−0¼	4.38
Voralberg Kraft 4 93	30	101	101¼	+0	+0¼	3.90
Vienna 4 93	100	100¼	100⅞	−0⅛	+0¼	3.97
World Bank 4¼ 93	250	101⅛	101⅞	+0¼	+0¼	4.00

YEN STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Asian Dev. Bk. 5⅞ 88	15	97	97⅞	+0¼	−0⅛	[illegible]
Australia 6.6 90	50	†100⅛	100⅞	+0	−0⅛	[illegible]
BFCE 6.4 90	30	96⅞	97⅛	+0	[illegible]	[illegible]
Eurofima 6.3 90	10	97	97⅞	+0⅛	[illegible]	[illegible]
Finland 6.7 88	25	97⅞	98⅛	−0¼	[illegible]	[illegible]
Norway 5.7 83	25	100¼	100⅞	−0¼	[illegible]	[illegible]
Oslo, City of 6.6 90	15	98¼	98⅞	+0	[illegible]	[illegible]
SNCF 6.8 90	20	98¼	98⅞	+0⅛	[illegible]	[illegible]
Sweden 6.7 90	40	95⅛	96⅛	+0¼	[illegible]	[illegible]

OTHER STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Algemene Bk. 8¾ 83 Fl.	75	95	95⅞	+0¼	[illegible]	[illegible]
BAT 8 88 LuxFr.	250	95⅞	96⅞	+0	[illegible]	[illegible]
Bayer Lux. 8 88 LuxFr.	250	96¼	97¼	+0⅞	[illegible]	[illegible]
Mees & Hope 7 83 Fl.	75	95¼	96¼	+0⅛	[illegible]	[illegible]
Brazil 7¾ 83 Fl.	75	95¼	95⅞	+0⅛	[illegible]	[illegible]
CFE Mexico 7¾ 83 Fl.	75	95⅛	96⅛	−0¼	[illegible]	[illegible]
Citicorp O/S Fin. 10 93 £	20	86	86⅞	−2¼	[illegible]	[illegible]
Copenhagen 7 93 EUA	30	†95⅞	96⅛	+0¼	[illegible]	[illegible]
EIB 7⅞ 88 LuxFr.	250	96⅛	97⅛	−0⅛	[illegible]	[illegible]
EIB 7¾ 85 Fl.	75	94⅛	95⅛	+1	[illegible]	[illegible]
EIB 9⅞ 88 £	25	88⅛	89	−2⅛	[illegible]	[illegible]
Oranjeboom 10¼ 90 £	15	80½	85⅛	−1⅞	[illegible]	[illegible]
Finance for Ind. 10 89 £	12	86⅛	86⅞	−1⅛	[illegible]	[illegible]
Finl'd. Ind. Fd. 8 88 LuxFr	250	97⅛	98¼	+0¼	[illegible]	[illegible]
Finland Ind. Bk. 7 93 EUA	15	†96¼	97⅛	+0¼	[illegible]	[illegible]
Gestetner Hld. BV 11 88 £	10	86	86⅞	−2	[illegible]	[illegible]
Neder Middenb. 6¾ 83 Fl.	75	96⅛	97⅛	+1	+1	[illegible]
New Zealand 6¾ 84 Fl.	75	96⅞	97⅞	+1⅛	[illegible]	[illegible]
Norway 7⅞ 88 LuxFr.	250	96⅛	97⅛	+0	[illegible]	[illegible]
Norway 6¾ 83 Fl.	100	95⅞	96⅛	+0⅛	+0¼	[illegible]
OKB 6¾ 85 Fl.	75	93⅛	93⅞	+1¼	[illegible]	[illegible]
Panama 8¼ 93 EUA	20	96⅞	97⅞	+0⅛	[illegible]	[illegible]
Renault 7¾ 88 LuxFr.	500	†96¼	97⅛	−0¼	[illegible]	[illegible]
Rowntree 10¾ 88 £	10	84¼	86⅞	−1	[illegible]	[illegible]
Rank O/S Hldg. 11¼ A$	12	96⅞	97⅛	−0¼	[illegible]	[illegible]
SDR France 7 93 EUA	22	†96⅞	97⅛	+0	[illegible]	[illegible]
Sears 10¾ 88 £	15	83⅞	84	−1⅞	[illegible]	[illegible]
Swedish Inv. Bk 8 88 LuxFr	500	99⅞	100⅛	+1	[illegible]	[illegible]
Whitbread 10¾ 90 £	15	87⅛	88⅛	−0¼	[illegible]	[illegible]

FLOATING RATE NOTES	Spread	Bid	Offer	C.date	C.cpn	C.yld
American Express 83	0¼	99¼	100	20/10	[illegible]	[illegible]
Arab Intl. Bank M6.5 83	0⅛	97	97½	31/1	[illegible]	[illegible]
Banco Nac. Argent. M5 83	0¼	97⅞	97⅞	21/1	[illegible]	[illegible]
Bank Handlowy M8 88	1¼	96⅞	97⅞	25/11	[illegible]	[illegible]
Bank of Tokyo M5¼ 88	0¼	97⅞	98¼	16/4	[illegible]	[illegible]
Banque Worms M5¼ 85	0⅛	97⅞	98¼	15/12	[illegible]	[illegible]
Bq. Ext. d'Alg. M5.375 84	0⅛	97⅞	98¼	9/7	[illegible]	[illegible]
Bque. Indo et Suez M5¼	0¼	99¼	98⅞	25.1	[illegible]	[illegible]
Bq. Int. Afr. Occ. M6.5 83	0¼	96⅞	97⅛	12/1	[illegible]	[illegible]
CCCE M5.25 98	0¼	97⅞	97⅞	3/2	[illegible]	[illegible]
ECF M5¼ 85	0¼	98¼	99¼	3/11	[illegible]	[illegible]
Chase Man. O/S M5¼ 93	0⅛	97⅞	97⅞	27/2	[illegible]	[illegible]
Costa Rica M8¼ 85	1¼	100⅛	100⅞	10/4	[illegible]	[illegible]
Credit National M5¼ 88	0⅛	97¼	97⅞	11/1	[illegible]	[illegible]
Enpetrol M7 86	0¼	198⅛	99¼	21/3	[illegible]	[illegible]
SFTE M5 83	0⅛	98⅛	98⅞	5/4	[illegible]	[illegible]
Ishikawajima M5¼ 85	0⅛	98⅛	99⅛	27/10	[illegible]	[illegible]
Ljubljanska M7.75 85	1	96⅛	97⅛	19/1	[illegible]	[illegible]
Midland Intl. M5¼ 93	0¼	97⅞	98¼	20/1	[illegible]	[illegible]
Nat. West. M5¼ 90	0¼	98¼	99⅞	21/12	[illegible]	[illegible]
Nippon Credit M5¼ 83	0¼	99⅛	99⅞	15/3	[illegible]	[illegible]
OKB M5¼ 88	0¼	98⅛	99¼	18/4	[illegible]	[illegible]
Offshore Mining 86	0⅞	98⅞	98⅞	19/1	[illegible]	[illegible]
Standard Chart. M5.5 90	0⅛	96⅞	97⅞	16/2	[illegible]	[illegible]
Sumitomo Heavy M5¼ 83	0⅞	99⅞	99⅞	16/3	[illegible]	[illegible]
Sundsvallsbanken M6 85	0¼	97⅛	98	4/4	[illegible]	[illegible]
Utd. Overseas Bk. M6 83	0⅛	99¼	99⅞	4/11	[illegible]	[illegible]

CONVERTIBLE BONDS	Cnv. date	Cnv. price	Bid	Offer	Chg. day	Prem
Asics 5¼ 93	9/78	628	108¼	109¼	+0⅛	[illegible]
Baker Int. Fin. 5¾ 93	1/79	38	106¼	107⅛	−0⅛	[illegible]
Boots 6¾ 93	2/79	2.16	97⅞	98	−0⅛	[illegible]
Coca-Cola Bottling 6¾	4/79	9	95⅞	95¼	+0	[illegible]
Ito-Yokado 5¾ 93	6/78	1473	106¼	107	+1¼	[illegible]
Novo Industries 7 89	4/79	299	97¼	98	[illegible]	[illegible]
Texas Int. Air. 7¾ 93	4/79	14.5	94¼	94⅞	[illegible]	[illegible]
Thorn Int. Fin. 7 88	11/78	3.67	102⅞	103½	+0	[illegible]
Tyco Int. Fin. 8¾ 88	9/78	21	105	105⅞	−0¼	[illegible]
Tyco Int. Fin. 5 84	5/78	61.5	74⅛	75¼	+1⅞	[illegible]
Asahi Optical 3¼ DM	12/78	588	108¼	108⅞	[illegible]	[illegible]
Casio Comp. 3¼ 85 DM	11/78	841	109⅜	110¼	+1⅞	[illegible]
Izumiya 3¼ 86 DM	10/78	489	113¼	113⅞	+1⅞	[illegible]
Jusco 3¼ 86 DM	1/79	1270	104⅞	105¼	+1⅛	[illegible]
Konishiroku 3¼ 85 DM	1/79	612	100¼	101	+0⅛	[illegible]
Murata Man. 3¼ 85 DM	11/78	854	99⅞	99⅞	+0⅛	[illegible]
Nippon Air. 3.5 88 DM	12/78	508	100	100⅞	+1⅛	[illegible]
Nippon Shinpan 3¼ DM	8/78	738	117¼	118⅛	+3	[illegible]
Nisshin Steel 4 86 DM	2/78	190	128⅛	129⅛	+0⅞	[illegible]
Ricoh 3¼ 86 DM	10/78	617	106¼	107¼	+0⅛	[illegible]
Sankyo Electric 3¼ DM	8/78	869	126⅛	127⅛	+1⅞	[illegible]
Sanyo Electric 3¼ DM	11/78	295	95⅛	96⅛	+0⅞	[illegible]
Seiyu Stores 3¼ 88 DM	9/78	1275	118⅛	119⅛	+1⅞	[illegible]
Stanley Electric 3¼ DM	12/78	625	105¼	106	+0⅞	[illegible]
Trio-Kenwood 3¼ 88 DM	11/78	711	98⅛	99¼	[illegible]	[illegible]

* No information available—previous day's price.
† Only one market maker supplied a price.

Straight Bonds: The yield is the yield to redemption of the bid-price; the amount issued is in millions of currency units except for Yen bonds where it is in billions. Change on week = Change over price a week earlier.

Floating Rate Notes: Denominated in dollars unless otherwise indicated. M = Minimum coupon. C.date = Date next coupon becomes effective. Spread = Margin above six-month offered rate for U.S. dollars. C.cpn = The current coupon. C.yld = The current yield.

Convertible bonds: Denominated in dollars unless otherwise indicated. Chg. day = Change on day. Cnv. date = First date for conversion into shares. Cnv. price = Nominal amount of bond per share expressed in currency of share at conversion rate fixed at issue. Prem = Percentage premium of the current effective price of acquiring shares via the bond over the most recent price of the shares.

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INTERNATIONAL FINANCIAL AND COMPANY NEWS

ERMAN BANKS IN LUXEMBOURG

Agreement on disclosure near

BY MARY CAMPBELL, RECENTLY IN LUXEMBOURG

FTER years of negotiations, erman banks and their super- isory authorities are now close agreement on the extent to hich German banking subsi- iaries in Luxembourg should port on their activities.

The substance of the agree- ent is that the German banks' bsidiaries in Luxembourg will nd the general part of the ports of their external auditors the German banking authori- es, giving the same information many respects as their mother mpanies would give in ermany. German banks empha- se, however, that in no cir- mstances would any names of dividual customers of what- er size be mentioned in these ports.

The information given is ex- ected to include a break down the maturity of assets and bilities, uncovered foreign change positions and a break- own on a country-by-country sis of the international lend- ing via their Luxembourg subsi- diaries.

The extent to which German banks report to their authorities on their Luxembourg operations has been the subject of tripartite debate for many years between the German authorities, the Luxembourg Banking Com- mission and the German banks themselves. Luxembourg's claims to complete sovereignty over its banking affairs has been one issue involved. However, it is generally accepted among German banks that any problems suffered by German banks in Luxembourg would have to be picked up by their mother com- panies in Germany and that for this reason the German authori- ties have a right to some informa- tion.

At one stage the possibility of a levy on Luxembourg banks to create a fund to cover against potential defaults was under discussion but this possibility is now dormant.

Safeguarding Luxembourg's sovereignty has been a concern throughout the negotiations and German banks are in principle being required to report to the German authorities on their business in all foreign financial centres not just Luxembourg.

Luxembourg is of particular interest to the German authorities because the German banks do much more of their in- ternational busines through their Luxembourg offices than else- where. The international business was relatively unimpor- tant to German banks until re- cent years but has recently been growing fast not least because of economic stagnation at home.

The question of control by the German authorities of Luxembourg operations was one of the issues discussed at a Press briefing by senior officials of the Deutsche Bank in Luxembourg at the end of last week. The latest annual figures for Deutsche Bank's Luxembourg subsidiary were reported, show- ing that its balance sheet total rose by 20 per cent to the equivalent of DM13.4bn on September 30.

The operating profit was also up by 20 per cent, wheras 51 per cent of Deutsche Bank's Luxembourg lending was de- nominated in DM and 43 per cent in dollars.

The holding company which Deutsche Bank set up in Luxembourg the previous year and uses for warehousing inter- national securities currently has holdings of some DM 320-330m and has not been substantially different in size during the last year. The holding company is financed by Deutsche Bank's Luxembourg aub subsidiary.

● The profit of Deutche Bank Companie Financiere Luxem- bourg SA rose by approximately 20 per cent in the year ending September 30 from LuxFr 508m in 1977, AP-DJ reports from Luxembourg.

Canon warns of slight setback for full year

BY YOKO SHIBATA — TOKYO, Oct. 16.

CANON, the Japanese camera and business machine concern, maintained a double figure growth rate in both consolidated profits and sales in the first half of the year, although expanding at a substantially slower pace than in 1977. For the full year, it expects a slight fall in profits.

Profits for the first half advanced by 10.8 per cent to Y4.9bn ($26.3m), from the level for the corresponding period last year, on sales up 12.4 per cent to Y105.3bn ($563m).

Canon raised its consolidated net profit in 1977 by 33 per cent to Y8.34bn, and sales by 27 per cent to Y194.4bn. It is now look- ing for net income for 1978 of about Y8.33bn, though it expects sales to rise by 8 per cent to about Y210bn.

Profits per share in the first half were Y46.3, or 52 per cent higher than on a non-consolidated basis.

Canon's stronger earnings in the six months were attributed chiefly to its sales overseas, which amounted to Y68.5bn for a gain of 14 per cent. The parent company covered exchange losses on its exports by measures such as raising export prices and rationalisation. In spite of un- favourable business conditions surrounding the camera industry, the company raised its domestic sales by 10 per cent to Y38.8bn, helped by strong sales of the AE-1 camera. Its overseas lia- bilities, such as foreign-currency denominated bonds, brought exchange gains of Y1.5bn as the yen rose in value.

Libya and Pakistan start joint company

By Chris Sherwell

ISLAMABAD, Oct. 16.

PAKISTAN AND Libya have agreed to establish a holding com- pany with an authorised capital of $100m to invest in agriculture and industry. The move is regarded as a sign of the close relations between the two Muslim countries.

The two governments will pro- vide the authorised capital on a 50-50 basis, with Libya supplying $50m in the form of foreign exchange and Pakistan furnish- ing the equivalent in rupees. The company will become an important source of foreign exchange in Pakistan, where most of the investment will take place.

Part of the first instalment of $10m which will be made avail- able within the coming month is earmarked for the establishment of a joint Libya-Pakistan ship- ping company and the formation of an investment banking corporation.

According to Mr. Mohammed Nawaz Khan of the Pakistan Finance Ministry, who signed the company documents in Karachi at the weekend, with Mr. Kiari Ahmed of the Libyan Ministry of Industries, the company will also invest in fertiliser, sugar and other industries.

It is hoped that the new com- pany, known as the Pakistan-Libya Holding Company, will be able to raise capital on the inter- national markets, taking advan- tage of Libya's high rating. Investment will be primarily in Pakistan, but Mr. Nawaz said that good investment opportunities anywhere in the world would be considered.

It will be up to the Board of directors — which has six members, three from each country, and a rotating chairman —to decide whether to take full control of projects or companies or only a controlling interest. The first chairman will be Mr. Kiari Ahmed, whose term of office will last three years.

This is the first holding com- pany of its type for Pakistan, but the Government is also negotiat- ing the establishment with Saudi Arabia of a similar company.

Carpenter forecasts upturn

BY JAMES FORTH — SYDNEY, Oct. 16.

CONTINUING PROBLEMS with property investments resulted in W. R. Carpenter Holdings, the island trader and diversified industrial group, earning only A$335,000 (U.S.$391,000) in the year to June 30 compared with a record profit of A$10.3m in 1976-77.

The result was after a special provision of A$6.56m by the finance company subsidiary for losses on realisation of real estate projects and doubtful debts, and follows a provision of A$1.25m in 1976-77.

Without these provisions the trading profit still plunged 40 per cent, from A$11.77m to A$7.05m reflecting losses in the apparel division and continued setbacks in the Fijian opera- tions.

Despite the setback the ordin- ary dividend has been held at 11.5 cents a share, requiring an unchanged A$4.97m.

The result was after an increase in the equity profits of associated companies, from A$841,000 to A$1.49m. This reflected an increase in the shareholdings in the paper merchant and food group, Dalton Brothers Holdings, now being wholly acquired after a protrac- ted takeover battle.

Revenue for the year rose almost 15 per cent, from A$190m to A$218m.

The directors forecast a strong recovery in profitability for the current year and said this would be assisted by the acquisition of Dalton Brothers. The weaknesses in corporate performance had been identified and corrective action taken was already being reflected in results.

The board added that this year there would be a departure from normal practice and a quarterly report would be provided at the annual meeting in November, which it was expected would sub- stantiate the recovery in profit- ability. There were already positive indicators of improve- ments in results of the main problem areas.

Since June, property sales con- tracts totalling more than A$3.7m had been settled with a further A$1m pending, while loan liquidations in the same period amounted to A$2.7m.

The spinning division was expected to maintain profit- ability following the Federal Government's action on import quotas for some textiles, while the wine division had a busy year extending its range of products and its market penetration.

Banca Catalana restructures

BY DAVID GARDNER — BARCELONA, Oct. 16.

ATALONIA'S MOST important oup of commercial banking terests based on the Banca talana is to initiate a process gradual integration over the xt six months. Although in e with the general trend wards consolidation throughout e Spanish banking system, the ove is largely seen as a pre- ntative measure against at- mpted takovers.

The Catalana group, put gether by the family of Sr. rdi Pujol, the leader of the talan nationalist minority in rliament, consists of the Banca talana, its industrial arm the nco Industrial de Catalunya, d three smaller entities includ- the Banco de Barcelona. Up ll now the structure of the up's equity had left it osed to outside bids.

In May, the Madrid-based masa Group made private proaches to a series of individual shareholders, in an attempt to build up a sizeable holding in the Catalan group. A last-minute intervention by Catalana foiled the bid, but the group would still remain vulnerable, particularly in view of the attractive prices being offered for Catalan banks by the "big seven" national banks this year.

The Banco de Santander for example has paid more than generously for two banks here in an attempt to acquire a regional shop window for its national operations.

The new group will have gross deposits of some Pta 130bn (US$1.8bn) leaving it just within reach of the national banks. It is believed that in the event of fusion, the group will retain the licence of the Banco de Barcelona which would take over responsibility for a specialised area of the group's business.

The integration is likely to involve the redeployment of staff, but the president of Banca Catalana has denied that it will involve redundancies as had been reported in the Press here.

Meanwhile, it has been announced that another regional bank, the Banco de Levante, had been acquired by the Liga Financiera. The Liga Financiera is a financial group in which the Garrigues family—one of whose members is the present Minister of Public Works, and another of which is the president of Ford Espanola and former Minister of Justice—has a controlling interest.

The Banco de Levante will be integrated with the Nuevo Banco, founded five years ago and bought last year by the Liga Financiera. The new entity will have deposits worth Pta 24bn.

Demag's nine month sales rise by 9%

DUISBURG, Oct. 16.

SALES OF Demag AG, the heavy engineering arm of the Mannesmann group, are 9 per cent ahead for the first nine months of 1978.

A spokesman declined to give absolute sales levels, but said world-wide order inflow was up 10 per cent aided by a 17 per cent jump in domestic orders compared to a 6 per cent rise in foreign orders.

Orders for the company's plant construction division rose by 20 per cent in the nine month period.

Less positive, with only a 1 per cent order rise, was the demand for standard products such as machine building and hydraulic products.

Last year, sales rose by 9 per cent to DM 2.32bn, largely due to Demag's export business. Overseas sales in 1977 rose by 13 per cent with domestic turn- over moving ahead by just 2 per cent.

AP-DJ

Oil ratios delay Aramco deal

BY OUR FOREIGN STAFF

SIGNING OF the agreement on Saudi Arabia's 100 per cent take- over of Aramco—the Arabian American Oil Company—is being held up by problems over the working of Saudi regulations on oil production ratios, according to the respected oil journal, Pet- roleum Intelligence Weekly.

The agreement, which was reached in March, 1976, but never signed, would increase Saudi Arabia's stake in the company from 60 to 100 per cent. The American companies—Exxon, Texaco, Socal and Mobil—would continue to run oil production for the Saudi Government for a fee, invest their risk capital in exploration and lift the bulk of the crude. Saudi Arabia has not displayed much urgency over signing the agreement but the companies would like it to be finalised in order to end anoma- lies over their U.S. tax positions.

The companies are entitled to 7m barrels per day, and are penalised if lifting drops below 6.5m b/d. But last spring Saudi Arabia instituted restrictions reducing annual exports of Arabian light crude to 65 per cent of total exports. The need to lift more heavy crude which is harder to sell in current market conditions brought Aramco's exports in July down to 6.5m b/d, and though there was a slight improvement in August the companies think the eight-month average of 6.9m b/d too close to the limit for comfort.

The ratio rules affect some elements in the Aramco takeover agreement and these may have to be recast, according to PIW. The companies have indicated their concern over the ratios to the Saudi Government. How- ever, PIW says that the agree- ment will "probably" be signed by the end of the year.

Shareholders approve Triad bid for SPP

By Our Own Correspondent

HONG KONG, Oct. 16.

THE TAKEOVER bid by a sub- sidiary of Mr. E. M. Khashoggi's Triad Holding Corporation for Southern Pacific Properties (SPP) in which the Saudi businessman already has a stake, has won shareholders' approval.

Shareholders of Southern Pacific have voted in favour of the HK 80 cents a share offer for SPP made by Barrick Invest- ments, a subsidiary of Triad.

At a meeting convened by the Supreme Court here—the offer was made through a legal scheme of arrangement—holders of 68.49m SPP shares voted in favour of the scheme and holders of 241,666 voted against.

The formal petition to sanc- tion the scheme is expected to be heard on October 24, the com- pany said. Trading in SPP's shares will cease as of October 20.

Barrick's 80 cents a share offer compares with a net tangible asset value of HK$ 1.25 a share for SPP after a property revalua- tion which effectively measured the company's assets on a liquida- tion basis. SPP's shares are trading at just under the 80 cents offer price and have moved up sharply since the share quotation was restored recently.

Of the 91.1m publicly-held shares in SPP, a total of about 47 per cent is owned by Penin- sular and Oriental Steam Naviga- tion Company, Trust Houses Forte and the J. G. Boswell Com- pany, all of which said at the time the offer was made that they intended voting in favour

Vienna savings bank opens Milan branch

y Paul Lendvai

VIENNA, Oct. 16.

VIENNA-based savings k, Zentralsparkasse der neinde Wien, has recently ned a representative office in an, making it the first trian bank to enter the ian market.

he director general of the tralsparkasse, Dr. Karl Vak, ssed at the opening that the n function of the Milan office be the forging of contacts ween companies, assistance the setting-up of subsidiaries Milan or in Vienna and sup- t for the firms with regard legal, tariff and transport blems.

he office is not allowed to en- e in banking business and Vak added that the experi- es to be gained in Italy will the bank to decide whether pen further foreign offices.

ustria's largest savings bank ects an intensification of tro-Italian trade. Italy is the ond largest market for tria with a share of 9.1 per t in aggregate exports but the trian share compared to Ger- ny and Switzerland is rela- ly small.

urthermore, Austrian sales concentrated in a handful of nches: timber, iron-steel, le, meat and dairy products. s there is ample scope for ther expansion, Mr. Vak phasised.

Generale Occidentale lifts net profits by 18%

BY OUR FINANCIAL STAFF

HIGHER PROFITS and divi- dends for the year ended June last are announced by Generale Occidentale, the French foods and financial group headed by Sir James Goldsmith.

After tax and minority interests, profits emerge at FFr 102.4m (US$24.1m) com- pared to FFr 86.5m, a rise of 18 per cent. The dividend is going up from FFr 8.25 a share to FFr 10.5.

Parent company profits last year were almost doubled at FFr 41.2m after tax, against FFr 21.5m. Half-way through the year the group reported a net profit of FFr 52.3m: there was no comparative figure since this constituted the first occasion on which GO had unveiled interim results.

The company, which controls the Cavenham foods group in the UK as well as Grand Union in the U.S. and Generale Alimentaire in France, recently proposed that a significant share- holding in GO be transferred to the Hong Kong group, General Oriental.

● Sharply higher profits are reported for the first half of 1978 by L'Air Liquide, the French producer of industrial gases. For the six months, pre- tax profits emerge at FFr 239.9m. The figures are, however, declared before "write-offs and provisions."

Swiss canton bank lending beyond limit

By John Wicks

ZURICH, Oct. 16.

DUE TO the granting of loans and guarantees beyond the permitted limit, the Nidwalden Cantonal Bank of Switzerland has run into difficulties. Its losses are put at several millions of Swiss Francs.

Both the Canton of Nidwalden and the Association of Swiss Cantonal Banks have expressed their support for the troubled bank, which is next to the smallest of the Cantonal banks in Switzerland. The Cantonal Government is to guarantee the future operations of the bank.

Internal reserves of the bank are "either used up or at least heavily burdened," while pub- lished reserves of the bank are affected, according to an auditor's report. The bank whose headquarters are in Stans, is said to have unbacked guarantees and loans equal to more than the legal maximum of 50 per cent of own assets.

The bank's balance-sheet total fell slightly last year from SwFr 530.96m to SwFr 522.8m. The outstanding guarantees and loans mainly concern two local manufacturing companies, to which the sums were granted in order to retain jobs.

Dividend up for Guinness Malaysia

By Wong Sulong

KUALA LUMPUR, Oct. 16.

GUINNESS MALAYSIA Berhad has again achieved record annual profits in spite of its unsuccess- ful attempt to gain a foothold in the competitive beer market in Malaysia and Singapore.

Pre-tax profits for the year to August rose from 15.5m ringgits to 20.6 ringgits (U.S.$9.3m), with sales rising from 111m to 130m ringgits ($U.S.58.5m).

After tax, the profits stood at 10.8m ringgits compared with 8.7m ringgits the previous year.

A final dividend of 23 per cent is declared making 38 per cent for the year, compared with 34 per cent previously. Shareholders are also to receive a one-for-two scrip issue, to capitalise on 12m ringgits from reserves and revaluation of assets. The new scrip will not be eligible for the final dividend.

Abercom share proposal

BY RICHARD ROLFE — JOHANNESBURG, Oct. 16.

ABERCOM INVESTMENTS, the engineering group, has circu- larised shareholders calling a meeting on October 30 to sanc- tion an increase in its authorised share capital and the conversion of R600,000 (U.S.$697,000) of unissued authorised preference share capital into equity. If approved, the proposals will enable the issued share capital to rise by about 4m from the present 14m shares.

The Board considers that it will be prudent, in due course, to raise long-term equity-based finance for the company in order to reduce short-term borrowings, and maintain a balanced financial structure between long and short term funds. At the June 30 year- end, the debt-equity ratio was 72 per cent and short-term borrow- ings amounted to 42 per cent of the R29m total debt. At the present share price of 195c, the group is capitalised at R28m.

Although no details have been finalised, banking sources believe that Abercom plans an R10m issue of convertible debentures, probably handled by Senbank, the merchant bank. The most recent convertible, by the furni- ture group, Russell Holdings, carried a coupon of 11.5 per cent, but with the continuing drift in interest rates, Abercom should be able to command slightly finer terms.

Setback for SBC fund

BY OUR OWN CORRESPONDENT — ZURICH, Oct. 16.

A GROSS dividend of SwFr 11 per certificate is to be distributed by Intercontinental Trust, of Basle, for the year ended August.

The investment fund, which is administered by the Swiss Bank Corporation (SBC) affiliate Societe Internationale de Placements, recorded a fall in net profits from SwFr 13.79 to SwFr 11.80 per certificate during the year.

This setback is attributed both to currency losses and to "pre- mature" redemptions of high- interest bonds. Fund holdings amounted at the end of August to SwFr 43.6m against SwFr 57.4m a year earlier, with 65.6 (76.9) per cent of assets in the form of shares and con- vertible bonds and 20.5 (15.8) per cent in straight bonds.

Hong Kong Bill details controls for quasi-banks

BY ANTHONY ROWLEY — HONG KONG, Oct. 16

A TIGHTER system of official controls over the deposit-taking companies forming Hong Kong's quasi-banking sector was an- nounced.

The move was foreshadowed in a speech earlier last week by the Governor, Sir Murray Maclehose, who said that a Bill would be introduced into the official legislative Council, pro- viding for a system of prudent supervision over Hong Kong's 234 deposit-taking companies.

The Bill was published in the Government Gazette and implements decision announced by the financial secretary, Mr. Phillip Haddon-Cave, to the Legislative Council earlier this year.

Supervision of the deposit- taking companies will be along similar lines to that already applied to banks licensed under the Banking Ordinance and will amend the Deposit Taking Com- panies Ordinance of 1976.

The amendments provide for detailed monthly returns by deposit-taking companies and "any other more detailed infor- mation that may be required," the inspection of the books of deposit-taking companies, and a requirement that such companies hold a minimum proportion of liquid assets in relation to their deposits.

The Bill was published last Commissioner of Banking to hold the new post of Commissioner of Deposit-taking Companies and to be responsible for the new sys- tem of detailed supervision.

A Government spokesman said that the liquidity requirements would not be defined or introduced until there had been an opportunity to examine the monthly returns over a period of time. The annual registration fee for deposit-taking companies goes up meanwhile from HK$10,000 to HK$30,000 (US$6,382).

Stricter controls over the deposit-taking companies follows sharp growth by the companies in the sector, whose total assets now exceed HK$25bn compared with about HK$8.5bn by the 74 licensed banks here.

Elbit plans share issue

By L. Daniel — HAIFA, Oct. 12.

ELBIT COMPUTERS in which Elron Electronic Industries of Haifa holds a 42.8 per cent take and Control Data Corporation one of 51.2 per cent, has pre- sented a draft prospectus to the Tel Aviv Stock Exchange for a first issue of shares to the public.

This will consist of 11.2m registered ordinary shares of I£1 nominal value each and 640 registered ordinary shares of I£ 5.

In addition, the company will offer 2,621,269 registered ordi- nary I£5 shares to present share- holders by way of rights issue and 240,000 such shares to its employees. The terms on which the issue are to be made have not yet been announced.

Elbit, which makes mini- computers, reported a net profit for the year ended March 31 of I£19.3m against I£11.6m on a turnover of I£373.2m compared with I£222m.

Lucas signs Iran deal

THE LUCAS Industries subsid- iary Rists Wires and Cables has signed a technical and licence agreement with the Reza Manu- facturing Company of Mashad, Iran for the manufacture of vehicle electrical wiring harnesses.

Reza supplies all the wiring for the Paykan, the Iranian version of the Chrysler Hunter car, of which 135,000 models will be built this year by Reza's parent Iran National.

Iran National recently reached agreement to build about 100,000 Peugeot 305 models a year by the early 1980s and Rists also hopes its wiring systems will be used.

surge at Bouygues

nch construction group ygues reports nearly doubled profits with a rise to 25.18m (U.S.$16.5m) from 13.42m for the first six nths of 1978, writes our ancial Staff. For the whole of year, the company estimates sales will increase by a d to FFr 4bn.

STRIA'S SKI MAKERS

The case for more integration

With some 250 separate companies producing ski equipment, the fragmented Austrian ski industry is ripe for a further round of rationalisation, argues PAUL LENDVAI writing from Vienna. This year currency influences are restricting selling prices, and earnings growth is lagging behind the increase in demand.

ING IS not only the most ular national sport in Austria also the basis for an impor- t economic arm. The estic ski industry, which is med to be the largest in the ld, accounts for more than per cent of world output and especially dominant among higher price ranges. One of every two pairs of remium" skis sold in the ld, comes from this relatively ll central European country.

here are some 250 Austrian panies which turn out a wide ge of winter sports articles luding over 1m complete ski dings and almost 1.5m pairs ski and climbing boots per um. But the structure is. ninated by the ski manu- turers whose business in n also depends on the cess of such world-famous strian champions as Miss ser-Proell or Mr. Franz ummer who in the last winter son once again ranked as nber one in the downhill es.

t is the massive international blicity, particularly the verage of World Cup races and winter Olympic games which provides the basis for the emergence of the Austrian industry as number one in the highly competitive world of ski manufacturing. Output rose by 16 per cent in 1976 and last year jumped by 71 per cent to 2.5m pairs of alpine skis worth Sch 2bn (U.S.$148m) and to 681,000 pairs of cross country short skis worth Sch 340m.

About 80 per cent of the output was exported last year with earnings reaching an all- time high of Sch 1.7bn. Some 2m pairs of Alpine skis accounted for Sch 1.42bn. The largest European markets are Germany (Sch 408m) and Switzerland (Sch 270m) in the U.S., Austria has increased its market share from 28 to 36 per cent with 492,000 pairs, worth Sch 270m sold last year.

However, the steady apprecia- tion of the schilling in foreign exchange markets, particularly against the U.S. dollar, coupled with stagnation on the domestic market has sparked off intense competition and tendencies to price cutting among the Austrian manufacturers. There have also been signs of increasing inte- gration within the industry. Atomic of Salzburg is the first Austrian ski company to embark on the takeover of a foreign producer, Dynamic of St. Etienne in France.

The Austrian company acquired for Sch 100m (in addi- tion to undisclosed commitments regarding accumulated losses) 86 per cent of the capital of Dynamic last year. Output of the French subsidiary this year doubled to 150,000 pairs and should eventually reach 220,000 pairs. In Austria Atomic will this year turn out 600,000 pairs.

The company claims to take the third place in the world ski rankings—after Ski Rossignal of France and the Austrian Fischer group—and a share of 23.5 per cent of the Austrian market.

Less than 10 years ago Mr. A. Rohrmoser, the owner only pro- duced some 40,000 pairs. Evidently, the fact that Miss Moser-Proell, the greatest woman ski champion in Austrian history has been using Atomic skis played a great role in the emerg- ence of this company as a market leader.

The takeover of Dynamic helped to make the Austrian parent company competitive at a time of shrinking domestic mar- ket. French costs were below the Austrian level, while Aus- trian know how also reduced the ture of one pair of skis from four to two hours.

Meanwhile, the domestic pro- ducers are faced with rising demand for new models. The largest company Fischer which produces 650,000 pairs of alpine and 250,000 pairs of cross-country skis was, for example, adversely affected by its failure to produce the so-called "compact" model. This year the producers will turn out a "mid-ski," a mixture of an alpine and compact model.

The competition among the 10 domestic producers is likely to lead this year to more industry nationalisation. According to dealers sales of alpine skis in the last winter season were down by 5 per cent, although this estimate however was disputed by the manufacturers.

Durinng the first six months this year the Austrian output of Alpine skis was up by 7.8 per cent compared to the same period in 1977 to 1.3m pairs with half of it exported. The output of cross-country skis rose to 421,000 pairs with 217,000 sold abroad.

But the prices have held rela- tively steady and the growth in earnings is lagging behind that of sales. Thus, the pressures on profit margins are likely to increase. All this is expected to give an added impetus to the trend towards concentration in this important domestic industry.

WORLD STOCK MARKETS

Wall St. falls 22 on interest rate worries

INVESTMENT DOLLAR PREMIUM
$2.60 to £1—79½% (80½%)
Effective $1.9890 37% (37½%)

FRESH WORRIES over rising rates coupled with disappointment about Congressional action on the tax and energy Bills sent Wall Street into its steepest fall in almost four years in moderate activity yesterday.

The Dow Jones Industrial Average, after touching a low for the day of 874.39, closed a net 21.92 down at 875.17, its largest one-day fall since November 18, 1974. The NYSE *All Common* Index retreated 1.13 to $57.80, while declines predominated over gains by 1,374 to 209. Trading volume picked up to 24.74m shares from last Friday's low level of 21.92m.

The Federal Reserve late last Friday increased its Discount Rate from 8 per cent to a record 8½ per cent, raising the threat of a new tightening of credit policy by the Fed. A Prime Rate increase to 10 from 9¾ per cent spread through the banking industry on Friday. Investors are worried that rising interest rates will hurt *economic expansion* and possibly lead to a recession.

Analysts said traders were further disappointed when the Discount Rate *boost* failed to spark any new life in the dollar, which lost more ground and *fell to a* new record low against the Deutsche Mark yesterday despite the realignment on the joint currency float in Europe.

The Federal Open Market Committee meets today and analysts are expecting further credit tightening to result.

Investors showed disappointment that the tax Bill did not provide more relief, especially in the area of capital gains. They also indicated disillusionment with the Energy Bill, which was far weaker than originally sought by President Jimmy Carter. The disappointment sent many institutional investors to the sidelines.

Glamour and Blue Chip issues were especially hard-it. **IBM**, which introduced a new machine combining an electrocardiogram with a small computer, still fell $7 to $279. **Boeing**, despite more 747 jet sales lost 3¼ to $65½.

Du Pont receded 3½ to $132, **Honeywell** 2¼ to $66½ despite increased third-quarter profits, **Smithkline** $3 to $89½, **Johnson and Johnson** 1½ to $80½ and **Merck** 1¼ to $58¾. **Warner-Lambert** managed to close unchanged at $26½ after higher third-quarter *earnings*.

Ramada Inns, the leading active shed ⅝ to $12, while **Caesars World** declined 1¼ to $41¾. The New York SE reduced margin requirements on both to 50 per cent.

Citicorp, the second most active issue, lost 1¼ to $27⅞, and **UAL** shed $2 to $37⅞ in active trading. **LTV** slipped ⅜ to $10½, but **Lykes** added ⅜ at $11⅜. Their Boards *have approved a merger agreement.*

Corning Glass reacted $2 to 59½ and **CPC International** 1½ to $52½ in spite of improved third-quarter net profits. **Flintkote**, however, added ¾ at $32¼ on better third-quarter results.

THE AMERICAN SE Market Value Index sustained a setback of 2.96 to 167.83 on volume of 3.29m *shares (3.11m).*

Sonderling Broadcasting was a firm exception, rising ¾ to $24½. **Viacom International** has sweetened its bid for Sonderling to $28 a share from $25.50. Viacom, on *the New York exchange*, lost 1½ to $26½.

Canada

Stocks moved sharply lower over broad front in another active business.

Analysts attributed the decline in part to the Bank Rate increase, announced last Friday, and noted that the market was due for a correction after setting a record high last week.

The Toronto Composite Index, down 32.7 at 1,290.0 recorded its largest decline since November 16, 1976. Metals and Minerals fell 44.7 to 1,140.1, Oils and Gas 41.7 to 1,662.5, Golds 15.6 to 1,664.8, Banks 8.75 to 302.26, Utilities 5.08 to 192.59 and Papers 2.46 to 153.06.

Alcan Aluminium fell 2½ to $30½, **Pacific Petroleum** C$2 to C$43, **Falconbridge Nickel "A"** ½ to C$34½, **Cominco** 1½ to C$32½ and **Canadian Pacific** 1½ to C$23¾.

Tokyo

Market moved sharply forward in active dealings, led by issues with good earnings prospects.

The Nikkei-Dow Jones Average rose 45.69p to a new record post-war high of 5,797.06. The Tokyo SE Index advanced 1.77 to a 1978 peak of 436.11, while volume reached 400m shares.

Canon rose Y14 to Y498, benefiting from higher profits, while also prominently firmer were **Iseki Agricultural Machinery**, up Y15 at Y279, **Komatsu** Y32 stronger at Y387, and **Isuzu Motor**, Y31 higher at Y401.

Toray gained Y6 at Y148, **Fuji Photo Film** Y8 at Y545 and **Nissan Diesel** Y10 at Y430.

Against the uptrend, however, **Chinon** declined Y20 to Y410 and **Victor of Japan** Y10 to Y1,130.

Germany

In a continuation of last Friday's upsurge, Bourse prices mainly moved higher, taking the Commerzbank index up 4.1 more to a fresh eight-year peak of *863.6.*

Dealers said the revaluation of the Deutsche mark within the European joint currency float had no effect on trading, and no downward trend could be noted among *export-intensive issues.*

Easier exceptions to the general uptrend, however, occurred in Department Stores and Motors. In the latter sector, **Daimler Benz** receded 4 to DM 351 and Volkswagen 1.60 to *DM 244.20, but* **Mercedes** rose DM 1.30.

Deutsche Bank advanced DM 2, while **Bayer** led Chemicals ahead with a DM 1 gain. **Siemens** rose DM 2.50 in Electricals.

Public Authority Bonds recorded losses ranging to 20 pfennigs with the Bundesbank selling DM 0.6m nominal of paper, compared with last Friday's purchases of DM 4.2m. *Mark Foreign* Loans were little changed in light trading.

Paris

Stocks closed mixed with gains holding a slight majority after below-average volume, following last week's lower tendency.

Brokers said a cut in the Call Money rate to 6¾ from 7 per cent had improved market sentiment, as well as the fact that the French franc appeared to have been little-affected by the effective revaluation of the Deutsche mark against the other snake currencies over the weekend.

Foods, Constructions, Mechanicals, Metals and Oils were generally higher at the close, but Electricals, Chemicals, Public Services and Textiles were easier-*inclined*.

Significantly firmer were **Chiers, Denain, Carrefour, Cie du Midi, Cofradel, Generale d'Entreprises, Poclain, Moet Hennessey, Cit-Alcatel, Esso and Europe 1.**

Declining issues included **Prieel, Kali, Paris-France, Jeumont-Schneider, Nobel-Bozel, Lyonnaise des Eaux, Sommer-Allibert and Imetal.**

Australia

Minings and Oils turned predominantly easier, while Industrials closed on a mixed note.

Diamond heavyweight **CRA** and most smaller diamond speculative issues lost ground as investors decided on a cautious approach to the latest Ashton venture progress report.

Although the venture has reported the discovery of gem quality diamonds, CRA, the major partner, fell 11 cents to A$3.69. **Northern Mining**, which holds a 5 per cent interest in the venture, retreated 15 cents to A$1.55. **Carr Boyd** receded 7 cents to 49 cents, **Western Queen** 4 cents to 32 cents and **Magnet** 3 cents to 51 cents.

Uranium stocks traded nervously in the wake of the latest delay to ratification of the Ranger agreement, and **Pancontinental** declined 40 cents to A$12.00 and **EZ Industries** 5 cents to A$3.15, but **Kathleen Investments** rose 5 cents to A$2.50.

Renison Tin came back 40 cents to A$10.90 on profit-taking after last week's good rise on higher *tin prices.*

BH South, subject to continuing speculation over a possible *take-over* bid by Peko-Wallsend, gained 4 cents more to A$1.55 against the downtrend.

BHP, ex the dividend, weakened to A$8.64, but **Associated Concrete** improved 5 cents to A$1.85 and **Myer Emporium** *3 cents to A$1.74.* In mixed Banks, **BNS Wales** lost 6 cents to A$7.70.

Amsterdam

Shares improved across a broad front, helped by the joint float realignment, lower Dutch interest rates and passage of U.S. energy legislation.

HVA advanced Fl 5, while **KLM**, **RSV** and **Bos Kalis** showed gains of Fl 2 or more.

Algemeine Bank moved ahead Fl 5.5 and **Amro Bank** Fl 1.4.

ADM, which is to merge with the ship repair activities of **RSV** unit **NDSM**, rose to Fl 125 bid from last Friday's level of Fl 103.

State Loans were very firm on interest rate considerations, gaining 2 per cent or more.

Hong Kong

Firmer-inclined in moderately active trading, with the Hang Seng index putting on 4.64 to 643.78.

Jardine Matheson added 20 cents at HK$18.00 ahead of the interim results, due today. **Hongkong Bank** hardened 10 cents to HK$20.20 and **Wheellock** 2.5 cents to HK$3.45, while *Hong Kong Land, Swire Pacific and Hutchison* **Whampoa** were unchanged at HK$11.90, HK$10.60 and HK$6.35 respectively.

Outside the leaders, **Hong Kong Wharf** rose 75 cents to HK$33.75, **Hong Kong Hotels** 60 cents to HK$20.90 and **Cheung Kong** 40 cents to HK$13.70, but **Hong Kong Telephone** shed 50 cents to HK$34.25.

Johannesburg

Gold shares eased further in a small trade following an initial marking-down on week-end New York prices. Losses ranged to 225 cents in heavyweights.

Mining Financials declined in sympathy with gold producers. Among Diamonds **De Beers** shed 10 cents to R7.85 and **Anamint** 50 cents to R81.00. However, Platinum shares improved on mixed demand with rises of up to 12 cents occurring. Other Metals and Minerals were generally neglected.

The industrial market was lower in a quiet business.

Indices

NEW YORK—DOW JONES

	Oct. 16	Oct. 13	Oct. 12	Oct. 11	Oct. 10	Oct. 9	1978 High	1978 Low	Since Compilat'n High	Since Compilat'n Low
Industrials	875.17	897.09	896.74	901.42	891.63	895.15	907.74 (8/9)	742.12 (28/2)	1051.70 (11/1/73)	41.22 (2/7/32)
H'me B'nds*	88.08	88.30	88.35	88.21	88.28	88.30	[illegible] (4/1)	86.75 (11/7)	—	—
Transport	243.98	249.81	250.12	249.85	248.58	248.38	261.49 (8/9)	199.31 (9/1)	279.88 (7/2/69)	13.23 (8/7/32)
Utilities	106.89	106.77	106.70	106.97	106.75	106.65	110.98 (3/1)	102.84 (22/2)	165.32 (20/4/69)	10.58 (28/4/42)
Trading vol. 000's	24,740	21,920	30,170	21,790	25,470	19,720	—	—	—	—

* Basis of Index changed from August 24

Ind. div. yield %	Oct. 13	Oct. 6	Sept. 29	(Year ago approx)
	5.92	5.59	5.48	5.49

STANDARD AND POORS

	Oct. 16	Oct. 13	Oct. 12	Oct. 11	Oct. 10	Oct. 9	1978 High	1978 Low	Since Compilat'n High	Since Compilat'n Low
Industrials	115.68	118.06	116.29	116.96	115.98	116.09	118.71 (12/9)	90.52 (6/3)	134.54 (11/1/73)	3.52 (30/6/32)
Composite	102.61	104.66	104.88	105.39	104.46	104.60	106.99 (12/9)	86.90 (6/3)	125.85 (11/1/66)	4.40 (1/6/32)

	Oct. 11	Oct. 4	Sept. 27	Year ago (approx.)
Ind div. yield %	4.69	4.79	4.66	4.75
Ind. P/E Ratio	9.81	9.59	9.45	9.38
Long Gov. Bond yield	8.58	8.64	8.68	7.76

N.Y.S.E. ALL COMMON

Oct. 16	Oct. 13	Oct. 12	Oct. 11	1978 High	1978 Low
57.88	58.88	58.08	58.28	60.38 (11/9)	48.37 (6/3)

Rises and Falls

	Oct. 16	Oct. 13	Oct. 12
Issues traded	1,909	1,882	1,883
Rises	209	556	678
Falls	1,374	855	774
Unchanged	326	495	431
New Highs	—	—	—
New Lows	—	—	—

MONTREAL

	Oct. 16	Oct. 13	Oct. 12	Oct. 11	1978 High	1978 Low
Industrial	—	219.75	221.49	222.14	222.14 (11/10)	162.50 (16/2)
Combined	220.55	225.35	226.81	226.61	226.61 (12/10)	170.82 (30/1)
TORONTO Composite	1290.0	1322.7	1332.7	1327.8	1332.7 (12/10)	998.2 (30/1)
JOHANNESBURG Gold	247.8	254.6	259.5	252.5	272.0 (14/8)	186.0 (20/4)
JOHANNESBURG Industrial	268.9	269.5	269.4	268.7	271.1 (15/9)	194.9 (13/3)

MONDAY'S ACTIVE STOCKS

	Stocks traded	Closing price	Change on day
Ramada Inns	323,400	12	−⅝
Citicorp	306,700	27⅞	−1¼
Valley Electric	256,400	14⅝	—
UAL	250,400	37⅞	−2
Middle S. Utilities	225,000	15⅜	—
Pan Amer Airways	207,400	8⅜	−⅜
Purolator	202,200	25⅝	−⅝
Phillips Petrolm.	179,000	32⅞	−⅞
Reliance Group	168,400	33⅛	−1
Masonite	167,400	20⅞	−⅞

BASE LENDING RATES

A.B.N. Bank	10 %
Allied Irish Banks Ltd.	10 %
American Express Bk.	10 %
Amro Bank	10 %
A P Bank Ltd.	10 %
Henry Ansbacher	10 %
Banco de Bilbao	10 %
Bank of Credit & Cmce.	10 %
Bank of Cyprus	10 %
Bank of N.S.W.	10 %
Banque Belge Ltd.	10 %
Banque du Rhone	10½%
Barclays Bank	10 %
Barnett Christie Ltd.	11 %
Bremar Holdings Ltd.	11 %
Brit. Bank of Mid. East	10 %
■ Brown Shipley	10 %
Canada Perm't Trust	10 %
Cayzer Ltd.	10 %
Cedar Holdings	10½%
■ Charterhouse Japhet	10 %
Choulartons	10 %
C. E. Coates	10 %
Consolidated Credits	10 %
Co-operative Bank	10 %
Corinthian Securities	10 %
Credit Lyonnais	10 %
Duncan Lawrie	10 %
The Cyprus Popular Bk.	10 %
Eagil Trust	10 %
English Transcont.	11 %
First Nat. Fin. Corp.	11½%
First Nat. Secs Ltd.	11 %
■ Antony Gibbs	10 %
Greyhound Guaranty	10 %
Grindlays Bank	‡10 %
■ Guinness Mahon	10 %
■ Hambros Bank	10 %
■ Hill Samuel	§10 %
C. Hoare & Co.	†10 %
Julian S. Hodge	11 %
Hongkong & Shanghai	10 %
Industrial Bk. of Scot.	10 %
Keyser Ullmann	10 %
Knowsley & Co. Ltd.	12 %
Lloyds Bank	10 %
London Mercantile	10 %
Edward Manson & Co.	11½%
Midland Bank	10 %
■ Samuel Montagu	10 %
■ Morgan Grenfell	10 %
National Westminster	10 %
Norwich General Trust	10 %
P. S. Refson & Co.	10 %
Rossminster	10 %
Royal Bk. Canada Trust	10 %
Schlesinger Limited	10 %
E. S. Schwab	11½%
Security Trust Co. Ltd.	11 %
Shenley Trust	11 %
Standard Chartered	10 %
Trade Dev. Bank	10 %
Trustee Savings Bank	10 %
Twentieth Century Bk.	11 %
United Bank of Kuwait	10 %
Whiteaway Laidlaw	10½%
Williams & Glyn's	10%
Yorkshire Bank	10 %

■ Members of the Accepting Houses Committee.

* 7-day deposits 7%, 1-month deposits [illegible]

† 7-day deposits on sums of £10,000 and under 6%, up to £25,000 7¼%, and over £25,000 7¾%

‡ Call deposits over £1,000 7%.

§ Demand and deposits [illegible]

† Bid. ‡ Asked. § Traded. ‖ New stock.

EUROPEAN OPTIONS EXCHANGE

[illegible]

NEW YORK, CANADA, GERMANY, TOKYO, AMSTERDAM, BRUSSELS/LUXEMBOURG, SWITZERLAND, COPENHAGEN, MILAN, VIENNA, AUSTRALIA, BRAZIL, OSLO, JOHANNESBURG, PARIS, SPAIN, STOCKHOLM

[illegible]

Turnover Cr.90.6m. Volume 47.3m.
Source: Rio de Janeiro SE.

Source Nikko Securities, Tokyo

Securities Rand US$0.72½
(Discount of 36.7%)

FARMING AND RAW MATERIALS

Tin soars as stockpile bid fails

BY JOHN EDWARDS, COMMODITIES EDITOR

TIN PRICES soared on the London Metal Exchange yesterday on the news that over the weekend the US Congress had failed to pass legislation authorising the release of 35,000 long tons of tin from the strategic stockpile.

Standard grade cash tin rose by £435—the biggest ever single daily increase—to close at the record price of £7,840 a tonne, after trading at over £7,900 earlier in the day.

The upward trend was accelerated by an unexpectedly large decline in tin stocks held in LME warehouses. The stocks fell by 125 tonnes, reducing total holdings to 1,340 tonnes—the lowest level since at least the early 1960s.

But the main influence on the market was the news that any moves to obtain the release of surplus tin from the US strategic stockpile will now, almost certainly, have to wait until the new Congress reassembles next year, after the November elections.

Traders had gone home on Friday evening fully expecting that the last-minute manoeuvring in Congress by the Administration would secure authorisation for the release of stockpile tin—30,000 tons for sale to the market and 5,000 tons as the US voluntary contribution to the International Tin Council buffer stock.

The proposal for tin stockpile releases had been separated from other plans for the sale of stockpile silver and the purchase of 50,000 tons of copper and tacked on to a Senate Sugar pricing Bill as a "sweetener" to persuade the Administration to accept a higher sugar support price for domestic growers.

In the event, the House of Representatives refused to stomach the proposed higher sugar price, and the tin stockpile legislation was rejected as a by-product.

On Friday, tin prices fell sharply on the prospect of 35,000 tonnes of stockpile tin easing the shortage of supplies. So when this threat was removed yesterday prices reacted quickly and violently, especially when the fall in warehouse stocks emphasised the present scarcity.

There was another heavy fall in copper stocks of 12,300 tonnes, cutting total holdings to a three-year low level of 407,700 tonnes. However, the stocks decline was in line with market forecasts and had to a large extent already been discounted.

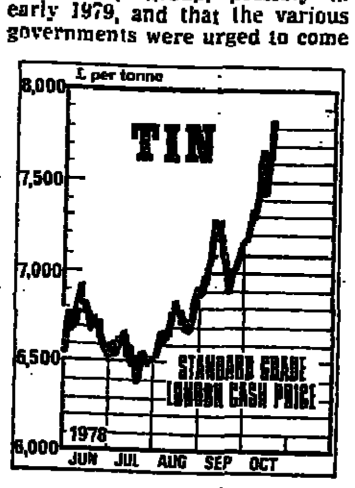
The failure of the proposed U.S. stockpile buying of copper, and general disinterest among buyers, depressed the market and cash wirebars eventually closed £9.25 lower at £748.25 a tonne.

Lead prices were boosted to near-record levels in early trading following a bigger than anticipated fall in warehouse stocks—down by 4,900 tonnes to 35,025 tonnes. But the downturn in copper reversed the upward trend and cash lead closed only £3.5 higher at £422.5 a tonne after having reached £434 earlier.

Zinc stocks fell by 2,550 to 70,775 tonnes and LME silver holdings declined by 110,000 to 18,790,000 ounces.

● U.S. state department officials in Washington expressed disappointment at the failure between copper producing and consuming nations to reach an agreement on the proposed international body to monitor the world copper market, reports Reuter.

They said the nations at the Geneva talks decided to call another meeting of the Unctad preparatory group, possibly in early 1979, and that the various governments were urged to come to the meeting to discuss ways to stabilise prices.



Peru is expected to make some proposals on stabilisation measures, but specific details were not yet known.

Mbala Mbabu, Zaire's Minister of Mines and chairman of Cipec (the inter-governmental council of copper exporting countries) was due to meet U.S. State Department officials yesterday to discuss the International Trade Commission recommendation that a 300,000 short ton quota be placed on imported copper.

State Department officials said Cipec has already expressed its concern to the department over the ITC recommendation.

President Carter has until October 22 to decide whether relief should be granted to the U.S. copper industry and the form the relief should take.

Reuter

France backs legal action on UK fish

By David White

PARIS, Oct. 16.

THE FRENCH Government has thrown its weight behind moves to take Britain to the European Court of Justice over its *unilateral conservationist fishing policy*.

M. Louis de Guiringaud, French Foreign Minister, said today that France had written to the EEC Commission to this effect.

Speaking at a lunch of British and American journalists here, M. de Guiringaud denounced the fact that one EEC member was blocking the whole process of an accord on fishing rights, which had been agreed between the other eight.

Britain, he claimed, boycotted the Berlin meeting at which the remaining members formed a gentlemen's agreement to comply with the EEC Commission's fishing quota and conservation proposals for this year.

Denmark has already asked the Commission to take legal action against Britain over its restrictions on fishing in the Norway point box.

A Commission official recently said he expected Britain would be taken to court over its fishing policy.

NEW GROUNDNUTS EXPORT QUOTA

NEW DELHI, Oct. 16.

The Indian Government has allowed the additional export of 350,000 tonnes of groundnut extraction, an official said. The new quota is in addition to 550,000 tonnes already allowed.

Reuter

State land policies denounced

BY CHRISTOPHER PARKES

GOVERNMENT intervention in the free market for farm land will lead agriculture into a spiral of "restriction, complication and decline," Mr. Roger Paul, president of the Country Landowners' Association, warned in London yesterday.

He denounced the nationalisation of land, dear to the hearts of many in the Labour Party, as "totally unnecessary and wholly damaging interference in one of Britain's most successful industries."

The problems affecting the structure of farming had nothing to do with financial institutions or foreigners buying land, Mr. Paul said.

They had arisen because of technological factors which would have had the same effect had no land fallen into the hands of the newcomers to the industry.

"The answers . . . do not lie in further Government interference and meddling, or in putting a stop to the free market in land.

"The problems have already been made much worse by wrong-headed and doctrinaire Government action," Mr. Paul charged. "There is only one rule about Government intervention: it always makes things worse."

Mr. Paul was commenting on the state of affairs which had led the Government to order a survey of land ownership in Britain. Lord Northfield's specially-appointed committee will report within the next month or so on the problems which have made it increasingly difficult for young farmers to enter the agriculture industry.

"The difficulties that caused the Minister to set up the inquiry really call for a simple reversal of Government policy towards privately-let land," Mr. Paul said.

Speaking against the clamour for nationalisation of land, he said no one should be deceived by the claim that if the State took over it would not involve itself in farming.

"It is not in the nature of Government to refrain from meddling and restricting and regulating," he said.

And he warned that farm owner-occupiers still seemed likely to be caught in the meshes of wealth tax and "they too will be forced to transfer land to the State."

He said the land nationalisation resolution adopted by the Labour Party conference recently called for the take-over of big estates and land owned by the institutions.

This was not because they were doing anything wrong or farming badly, nor did these owners enjoy any special tax privileges.

"The truth as we all know is that they suffer from totally vindictive taxation without any relief whatsoever."

SUGAR MARKET

U.S. Bill defeat cuts prices

BY RICHARD MOONEY

WORLD SUGAR prices fell sharply yesterday as a result of the defeat of the proposed sugar Bill in the U.S. Congress on Friday night.

The House of Representatives had passed a Bill based on a 15 cents a pound guaranteed price while a Senate Bill called for a 16 cents minimum.

The Senate proposal conflicted with the declared position of the Carter Administration, which set an upper limit of 15 cents, and both Bills included price escalator clauses which were expected to be resisted by the President.

The House wanted escalation to take account of any increase in basic labour costs, while the Senate wanted escalation to cover increases in total costs.

A joint House/Senate committee eventually came up with a compromise Bill setting the price minimum at 15.75 cents. This was accepted by the Senate but defeated in the House of Representatives. Informed sources claimed, however, that even if it had been passed by both houses the compromise measure would have been vetoed by the President.

The possibility of a new U.S. domestic sugar policy being agreed has now been ruled out for this year at least. The outcome will also result in a long delay on ratification by the U.S. of the International Sugar Agreement.

Sugar dealers on the world market responded by marking prices down. Yesterday morning, the London daily raw sugar price was fixed at £110 a tonne, £2 below Friday's level, and by the close the March position on the London futures market was quoted at £115.075 a tonne, down £7.10.

London market sources thought the fall was based mainly on "sentiment," however. They said the U.S. decision in no way altered the basic supply/demand situation and they doubted that any signatories to the Sugar Agreement would decide to defy the quota restrictions simply because the U.S. had not signed.

They admitted that the setting up of a stockpile fund would be delayed but thought the 2.5m tonnes stockpile envisaged under the terms of the agreement would not have affected the market situation significantly.

Yesterday's selling was seen as a disappointed reaction. Hopes of the U.S. signing the pact had encouraged the recent price rise and the disappearance of this factor led many traders to sell their holdings. But the sources said Chinese buying had been a more important factor and a major fall was unlikely until this was seen to have ceased.

Bumper year for Indian crops

NEW DELHI, Oct. 16.

INDIA'S BUMPER foodgrain harvest of 125.6m tonnes in 1977-1978 was matched by peak production of several other crops, according to Government figures released here.

Record outputs were achieved for sugar cane, oilseeds, cotton and jute. Although the recent floods are expected to cut production back in 1978-79, the Agriculture Ministry feels the country is "out of the woods" both in foodgrain and other crops.

There was a particularly big rise in sugar cane output, up to a record 181m tonnes compared with 153m tonnes in 1976-77 and an average of 133m tonnes in the period 1971 to 1976.

There is an unusually large surplus available for export. But since world prices are not favourable, earnings from exports will not match the level reached two years ago.

The bigger crop of oilseeds is being seen with more satisfaction. The failure of groundnut crops in the previous three years led to shortages and high prices of edible oil.

Total oilseeds production in 1977-78 was 9.53m tonnes compared with 8.33m tonnes in the previous year, and an average of 8.8m tonnes over the period 1971-76.

Cotton production in 1977-78 was 7.1m bales (170 kilos each) compared with 5.84m bales in the previous year. The country is now self-sufficient in long-staple cotton and has a surplus of short-staple cotton.

EEC beet chief hits out at cutback plea

BY CHRISTOPHER PARKES

BRITISH FOOD manufacturers' appeals for a reduction in the Common Market's sugar beet production, and a cut in prices to discourage inefficient farmers, have been dismissed out of hand in a vitriolic open letter from M. Henri Cayre, the French leader of the European beet growers' confederation.

And he has accused the Food Manufacturers' Federation and the Cocoa, Chocolate and Confectionery Alliance which issued the call last month of speaking for "multinational firms set up in Great Britain, whose interests are very different from those of the Common Market."

The FMF's notions about the European economy are described as "completely out-dated," its arguments "absurd," its claims "*pure fantasy*" and its statistical evidence as "neither serious nor honest."

The fearsome M. Cayre represents some 450,000 beet growers who form arguably the most influential and certainly one of the richest lobbies at work in the labyrinths of the Common Agricultural Policy.

His main point is that the present world surplus of sugar will shortly turn into a shortage and that EEC exports will become an asset to the EEC rather than a financial burden.

"Just because, for three years, world production has been higher than consumption, you *think that the EEC should reduce* its exports by 50 per cent on the world market. This attitude is absurd," he admonished Mr. Cyril Coffin, director-general of the FMF, and originator of the British appeal.

"Whether you are happy about it or not, Great Britain has joined the Treaty of Rome and accepted without reservations all the implications of the Common Agricultural Policy," he wrote with disarming if not completely convincing, faith.

The FMF wrote in an open letter to M. Cayre suggesting that the EEC's acreage of sugar beet should be reduced by more than 200,000 acres.

By cutting production of sugar the Community could reduce the amount spent each year on subsidising exports to the world market.

And by holding prices for beet down, the Community could drive the less efficient farmers out of sugar and also cut raw material prices for food manufacturers.

Last year, according to the FMF, the EEC paid a total of £400m to dispose of more than 3m tonnes of sugar outside its frontiers.

M. Cayre pointed out that if the 1.3m tonnes of cane sugar imported from the old Commonwealth were included under the budget heading of overseas development aid, the cost would appear much less dramatic.

And in his parting shot he took a swipe at the FMF's manners. Loading his postscript with Gallic venom, he wrote: "*You will notice that my reply to your letter is written in English in case your personal ethics prevent you from reading another language.*"

World platinum demand 'exceeds supply'

BY JOHN WICKS

Zurich, Oct. 16.

CREDIT SUISSE in Zurich says world demand for platinum will exceed supply by about 350 tons this year. The bank sees production as falling by 400 tons to 2,450 tons in 1978, while demand rises from 2,690 to 2,800 tons.

The reduction on the supply side is attributed by Credit Suisse to lower sales to the free market by the Soviet Union.

Supplies from this source are said to have fallen from about 700,000 oz annually to only about 300,000-400,000 oz this year. South Africa and Canada have been unable to fill the gap, since what Credit Suisse believes are the problems of nickel mining in those countries have hindered a rise in output.

Main markets for platinum this year will be Japan, with 1,200 (1977: 1,090) tons and the U.S. with 900 (800) tons of purchases.

No additional impulses are foreseen from these markets in the present economic conditions, however.

COMMODITY MARKET REPORTS AND PRICES

BASE METALS

COPPER—Lost ground in fairly active trading. After opening lower at £760 owing to the trend in New York markets the Friday forward metal pushed ahead to touch £777 in the morning rings reflecting the surge in the tin market coupled with the substantial decline in warehouse stocks. However, the market began to ease on the morning kerb and weakened further in the afternoon in [illegible] ... three months £783, 83.5. Kerb: Wirebars, three months £774, 73, 73.5. Afternoon: Wirebars, three months £770, 70.5, 70, 69, 68.5, 68, 70, 69.5, 69. Cathodes, three months £759. Kerb: Wirebars, three months £769, 69.5, 70, 69.5.

TIN—Soared to record levels following news that the U.S. Congress had adjourned without passing the GSA stockpile releases bill. Merchant covering, physical demand, stop-loss buying and chartist buying [illegible] ... the rings profit-taking and hedge selling pared the price to around £7,540 and this easier trend carried on in the afternoon where forward metal dipped to £7,520 before closing on the late kerb at £7,525. Turnover, 2,220 tonnes.

Morning: Standard, three months £7,650, 70, 75, 80, 80, 70, 60, 50, 60, 55. Kerb: Standard, three months £7,550, 45, 40, 30, 40. Afternoon: Standard, three months £7,545, 40, 35, 20, 30, 35, 30. Kerb: Standard, three months £7,530, 15 ...

TIN	a.m. Official	+ or —	p.m. Unofficial	+ or —
High Grade	£	£	£	£
Cash	7890-925	+562	7850-60	+455
3 months	7570-90	+490	7555-70	+422
Settlem't	7925	+575	—	...
Standard				
Cash	7880-920	+566	7830-50	+435
3 months	7595-60	+482	7555-70	+440
Settlem't	7920	+570	—	...
Straits E.	$1935	—20	—	...
New York	—			

COPPER	a.m. Official	+ or —	p.m. Unofficial	+ or —
Wirebars				
Cash	753.5-4	—5	748.5	—9.25
3 months	775.5	—3.5	769.5	—8.5
Settlem't	754	—5	—	...
Cathodes				
Cash	742.5	—4	736-7	—10.2
3 months	763.5	—2.5	757.5-8	—8.5
Settlem't	742.5	—4	—	...
U.S. Prod.			*69-71.025	...

LEAD, ZINC, ALUMINIUM, NICKEL—[illegible]

G. Index Limited 01-351 3466. Three months Copper 766.5-772.5

Lamont Road, London SW10 0HS

1. Tax-free trading on commodity futures.
2. The commodity futures market for the smaller investor.

SILVER

Silver was fixed [illegible] for spot delivery in the London bullion market yesterday [illegible] ... 590c).

COCOA

Prices remained in a narrow range throughout a quiet day, closing as follows. Gill and Duffus reported.

Sales: 1,085 (1,504) lots of 10 tonnes.

COFFEE

A very quiet morning session saw Robustas hover more or less unchanged after light early gains. Drexel Burnham Lambert reported. A weak New York C contract encouraged profit-taking in London in the afternoon and closing values were £20 lower on the day. Physical business was slow to pick up after the weekend.

RUBBER

GRAINS

SOYABEAN MEAL

SUGAR

MARK LANE—Market volume was sparse although trading levels remained constant from last week. Milling wheat delivered London—Oct £91.00, Nov. £94.00, Dec. £95.00, Jan./Feb./March £98.00. Denaturable quality wheat delivered E. Anglia—Oct £88.00, Nov. £89.50, Dec. £90.50, Jan./Feb./March £93.00. Barley delivered E. Anglia—Oct. £80.00, Nov. £81.50, Dec. £83.00, Jan./Feb./March £85.50.

... 5.00. Satsumas—Spania: Trays 5.00-6.50. Grapefruit—Dominican: 3.60-4.80; Cyprus: 4.50; Cuban: 4.00-4.20; Israeli: Jaffa 4.20-4.55. Apples—French: New crop Golden Delicious 20 lb 72 2.00-2.20, 84 1.60-1.90, 40-lb 3.50-4.00, Stark Crimson 20-lb 84 2.40, 72 2.70, Granny Smith 2.10-2.60. Pears—French: Alexandria 2.50. Per pound Italian: Williams 0.14-0.18. Plums—Rumanian: Anna Spath per tray 1.50. Grapes—Italian: Regina 1.80-2.00, Black Regina 2.30. French: Alphonse per pound ...

WOOL FUTURES

MEAT/VEGETABLES

Decline in quality tea

By Our Commodities Staff

SUPPLIES OF top quality tea were all but non-existent at this week's London tea auction. As a result tea designated as "quality" by the London Tea Brokers' Association fetched on average only 150p a kilo compared with 170p last week.

Traders were at pains to point out, however, that the lower price reflected lower quality of available supplies rather than slacker demand. The market for other grades was relatively firm with medium tea declining only 2p to 116p a kilo and plain remaining unchanged at 81p a kilo.

Supplies of quality tea have been lower this year because of shipment shortfalls resulting from uncertainty about export duty rates in India.

This has created a shortage of high quality North Indian tea which has therefore been commanding inflated prices in recent weeks.

Sunflower crop hit in Ukraine

MOSCOW, Oct. 16.

COOL WEATHER, heavy rainfall and disease have retarded and partly spoilt the sunflower crop in the Ukraine, which usually provides almost half the total Soviet yield.

A report in the Government newspaper Izvestia also blamed bad organisation for a poor harvest so far but gave no intermediate figures.

Last year, the Ukraine produced just under 2m tonnes of sunflower seed but the newspaper said 1978 was the third year running that the Republic's crop was disappointing.

Reuter

PRICE CHANGES

Price in tonnes unless otherwise stated

	Oct. 16 1978	+ or —	Month ago
Metals			
Aluminium	£710	......	£710

* Nominal. m June-Aug. s Oct.-Nov. x Per ton.

INDICES

FINANCIAL TIMES

Oct. 16	Oct. 13	Month ago	Year ago
264.00	263.05	264.59	244.58

(Base: July 1, 1952=100)

REUTERS

Oct. 16	Oct. 13	Month ago	Year ago
1516.5	1515.1	1464.2	1464.2

(Base: September 18, 1931=100)

DOW JONES

Dow Jones	Oct. 16	Oct. 13	Month ago	Year ago
Spot	384.33	[illegible]	[illegible]	373.28
Futures	384.49	[illegible]	[illegible]	337.11

(Average 1924-25-26=100)

MOODY'S

Moody's	Oct. 16	Oct. 13	Month ago	Year ago
Sple Commty	975.5	971.8	959.0	858.3

(December 31, 1931=100)

GRIMSBY FISH—Supply good, demand good. Prices at ship's side (unprocessed) per stone: Shelf cod £4.00-£4.80, codlings £2.50-£3.30; large haddock £5.00-£4.80, medium £3.40-£4.00, small £2.40-£3.20; best plaice £4.60-£4.80; ... small £3.40-£4.40 ... £7.50, (medium) ... £6.20, (medium) ... saithe £1.30-£1 ...

LIVERPOOL COTTON—Spot and shipment sales amounted to 310 tonnes. Users again were anxious to supplement existing stocks. Further business in Middle Eastern qualities were recorded with some support in African growths.

U.S. Markets

NEW YORK, Oct. 16.

Cocoa—Dec. 161.90 (163.90), March 163.10 (163.50), May 162.60, July 162.40, Sept. 161.40, Dec. 157.65. Sales: 290.

Coffee—"C" Contract: Dec. 153.50-153.90 (156.55), March 146.00-146.10 (146.85), May 141.00, July 135.25-137.25, Sept. 134.75- ...

††Wheat—SCWRS 13.5 per cent protein content cif St. Lawrence 178.57 (178.72).

All cents per pound ex-warehouse unless otherwise stated. * $s per troy ounce—100 ounce lots. † Chicago loose $s per 100 lbs—Dept. of Ag. prices previous day. Prime steam fob. NY bulk tank cars. ‡ Cents per 56 lb bushel ex-warehouse, 5,000 bushel lots. § $s per troy ounce for 50 oz units of 99.9 per cent purity delivered NY. ¶ Cents per troy ounce ex-warehouse. ‖ New "B" contract in $s a short ton for bulk lots of 100 short tons delivered f.o.b. cars Chicago, Toledo, St. Louis and Alton. ** Cents per 69 lb bushel in store. †† Cents per 24 lb bushel. ‡‡ Cents per 48 lb bushel ex-warehouse. §§ Cents per 56 lb bushel ex-warehouse, 1,000 bushel lots. ¶¶ $C per tonne.

Rise in U.S. corn reserves

WASHINGTON, Oct. 16.

THE AMOUNT of corn in the U.S. grain reserves rose to 386m bushels in the week ended October 13 from 352.8m in the previous week, U.S. Agriculture Department officials said.

Wheat entries in the reserves increased slightly to 400.3m bushels from 399.5m in the week ended October 6.

Total feedgrains in the reserves reached 12.6m tonnes from 11.6m previously.

Reuter

STOCK EXCHANGE REPORT

Downturn continues on suggestions of price curbs

Equity index above lowest at 494.6—Gilts fall again

Account Dealing Dates
Option

*First Dealings	Declarations	Last Dealings	Account Day
Oct. 2	Oct. 12	Oct. 13	Oct. 24
Oct. 16	Oct. 26	Oct. 27	Nov. 7
Oct. 30	Nov. 9	Nov. 10	Nov. 21

* "New time" dealings may take place from 9.30 a.m. two business days earlier.

Weekend suggestions that price curbs along with stricter monitoring by the Price Commission of companies which break the five per cent pay limit could form part of a compromise between the Government and unions on pay had a predictably dulling effect on stock markets yesterday.

The thought of re-imposition of price controls — quickly rejected by CBI Director-General Sir *John Methven* — *inhibited* investment enthusiasm and leading equities soon gave fresh ground. British Funds also extended their recent downturn, reflecting continuing anxieties about interest rate trends and doubts over the Government's *funding programme.*

At one stage, the industrial sector seemed especially drab, but with dealers reporting little genuine selling and only the opening of new bear positions at the start of a new trading account, the market steadied later. After the official close of business, leading stocks rallied significantly as some of the positions taken out earlier were closed.

This was well illustrated in the final calculation of the FT Industrial Ordinary share index which registered a fall of only 1.6 at 494.6, after having been 5.2 down at the 2 pm count. Falls in all FT-quoted industrials, however, outnumbered rises by four-to-one.

Stores and other consumer-orientated sections were *not* troubled by the slowdown in September retail sales, the former being content to await today's interim figures from Marks and Spencer. Trading announcements in general, much fewer than recently but occasional items aroused *interest.*

Still lacking in confidence and worried by interest rate possibilities, Gilt-edged securities edged lower in reduced trading. The longs closed around ¾ lower but were improving in inter-office dealings, while the shorts trimmed similar falls to ¼ and continued to rally after-hours. Corporations were caught up with Friday's easiness in the main funds and recorded losses extending to a point.

Early selling of the investment *currency premium saw it dip* sharply to 78¼ per cent before institutional support at the lower levels helped a rally to 79¾ per cent for a fall of 1¼ from Friday's close. Yesterday's SE conversion factor was 0.7316 (0.7293).

The generally dull conditions in equity markets tended to restrain activity in Traded Options and only 432 contracts were recorded compared with 646 last Friday.

Banks quietly dull

Little interest was shown in the major clearing Banks on the first day of the new Account and *quotations* drifted *gently* lower. Discounts closed easier for choice with **Alexanders** 5 lower at 245p, but ahead of their interim statements, due tomorrow, **Jessel Toynbee**, 62p, and **Smith St. Aubyn**, 80p, held steady. **Guinness Peat** declined 5 to 230p among *merchant banks and losses of 3* and 4 respectively were seen in **Antony Gibbs**, 51p, and **Kleinwort Benson**, 94p.

Insurances were also subdued. Further small selling and lack of support prompted a fall of 10 to 250p in **C. E. Heath**, while **Hambro Life** *receded 7 to 382p xd.*

Breweries closed slightly above the worst following another slow trade. **Allied** ended a penny easier at 84p, after 83p, while **Bass Charrington**, 161p, and **Guinness**, 156p, gave up 2 and 3 respectively. Elsewhere, **Geo. G. Sandeman**, at 62p, lost Friday's rise of 4 which followed the interim statement. **Distillers** were also on offer, losing 3 to 196p for a two-day reaction of 9.

Building descriptions, marked down at the outset, held steady at the lower levels in the absence of sellers. Bigger-priced issues such as **Richard Costain**, 234p, and **Taylor Woodrow**, 406p, both shed a few pence, but **Allied Plant** hardened ½ to 18p following the interim results. An investment recommendation lifted **Edward Jones** 2 to 15p, while news of a £10m *industrial development in* Birmingham helped **Bryant** add a penny at 46p. **London Brick** improved ½ to 69½p; the interim results are due October 26. **Rugby Portland Cement** eased that much to 76½p following half-year returns marginally below market *estimates.*

ICI fell away to 385p, but on scattered bear closing ended a net 2 cheaper at 388p. **Leigh Interests** eased 4 more to 126p; last year the interim results were announced on November 24. Ahead of tomorrow's interim results, **Farm Feed** firmed 5 to 68p. **Croda International** were quoted ex the scrip issues at 61p, while the new deferred ordinary, after a reasonable turnover, closed at 31½p after extremes of 30½p and 33½p.

Wallis wanted

Secondary issues provided scattered features in Stores. Weekend Press comment drew buyers' attention to **Wallis** which improved sharply to touch a 1978 peak of *97p before closing a net* 6 up at 86p. **Peters** rose 3 to 49p on buying ahead of Friday's preliminary results and **Bambers** hardened 2 to 162p on an investment recommendation. Having recently rejected bids from both Pentos and Lonsdale Universal, **Midland Educational** gained 5 to 225p on hopes of another offer.

Marks and Spencer became fairly active *in* front of today's interim results but closed without alteration at 82p. **British Home**, also with first-half figures due tomorrow, ended 5 off at 204p. In Shoes, **Lambert Howarth** at 54p stood out with a Press-inspired rise of 6.

Small selling in an unwilling market left Electricals with a string of small losses. **Forward Technology** closed 2 cheaper at 134p following preliminary figures, while **Racal Electronics**, 335p, and **Campbell and Isherwood**, 125p, lost 5 apiece. **Wholesale Fittings** gave up a like amount at 229p *in a restricted market, while other* dull spots included **Dreamland**, 2 off at 35p, and **Audio Fidelity**, 3 easier at 33p.

Quietly dull throughout most of the trading session, Engineering leaders took a turn for the better in the late trading. **John Brown** eased to 446p before recovering to close 2 firmer on balance at 452p. Awaiting Thursday's interim results, **Hawker Siddeley** drifted off to 234p, but rallied to finish without alteration at 238p. Elsewhere, modest falls were fairly numerous. Among the more noteworthy movements, **Ransomes Sims** gave up 10 to 178p, while **Stothert and Pitt**, 230p, **Simon Engineering**, 270p, and **Porter Chadburn**, 108p, all recorded falls of around 6. Adverse Press mention left **Chemring** a few pence cheaper at 105p. Against the trend, buying interest was shown in **Mining Supplies**, which advanced 6 to 106p, while **Wadkin** continued firmly at 154p, up 2. **Birmingham** *Mint hardened 2 to 130p in* response to favourable weekend Press mention.

Press suggestion of a bid from Gulliver Foods directed a fair amount of interest to **Louis C. Edwards** which jumped 3 to a 1978 peak of 16½p. Elsewhere in Foods, **Cartiers** picked up 2 more at 96p on small buying in anticipation of the interim figures which are expected shortly. **Tate and Lyle** closed without alteration at 172p following news of the company's negotiations to sell its South African interests to Anglo American Industrial Corporation; the latter finished 30 cheaper at 530p. **Associated Dairies** and **J. Sainsbury** closed 3 cheaper at 242p and 225p respectively. **William Low**, 4 easier at 93p, provided the only *significant* movement in Supermarkets.

Miscellaneous Industrial leaders rallied in the late dealings to close a few pence above their lowest levels. **Beecham** touched 686p initially but finished unaltered at 690p, while **Turner and Newall** ended 5 off at 177p xd, after 175p. A dull market last week in reaction to the disappointing results, **Glaxo** retreated further to 565p before closing unchanged at 570p. Elsewhere, **Brook Street Bureau** put on 5 to 85p, after 87p, following the more-than-doubled interim profits and proposed 50 per cent scrip-issue, while **Andersons Rubber** gained 9 to 54p on small buying in a thin market. **Relyon PBWS** edged forward 2 to 114p in response to Press comment and improvements of 3 and 5 respectively were seen in **Dundonian**, 42p, and **White Child and Beney**, 122p. **Redfearn National Glass**, however, fell 7 more to 280p on further consideration of the chairman's profits warning and **Dunbee-Combex-Marx** cheapened 4 to 120p ahead of Thursday's mid-term figures. **Charles Hill of Bristol**, 85p, and **Vinten**, 137p, lost 5 apiece.

Barr and Wallace Arnold A gained 8 at 169p xd *following* a favourable Press mention. Occasional speculative interest lifted **Photax** 3 to 40p.

Trading conditions in the Motor sectors were subdued. Garages and Distributors tended easier with falls of 2 marked against **Caffyns**, 105p, **Charles Hurst**, 88p, and **T. C. Harrison**, 113p. **H. Perry**, however, firmed 3 to 118p following news that as a result of certain *modifications* of its leasing agreements the Inland Revenue has indicated that it does not propose to pursue its objections to the company's claim.

Newspaper issues were barely tested, but in Paper Printing, **John Waddington** lost 4 at 204. *Elsewhere, Saatchi and Saatchi* shed 6 at 119p.

Leading Properties eased initially but steadied to close little changed. **Regalian** added 2 to 18p and **Dares Estates** firmed a penny to 17½p, both helped by investment comment. Mirroring demand that developed late on Friday, **Mountview Estates** gained 6 to 90p, but **Dorrington** eased a penny to 58p following the interim results.

Oils quiet

Oil leaders passed a *quiet* and dull session. **British Petroleum** closed without alteration at 916p after having been a few pence easier, but **Shell** finished 6 cheaper at 570p, after 568p, while dollar premium influences left **Royal Dutch** ½ lower at £44¼. Elsewhere, **Oil Exploration** drifted off to close 2 down at 202p along with **Tricentrol**, a similar amount off at 170p.

Steel Bros. featured with a fall of 20 to 215p on the first-half profits setback. Elsewhere in *Overseas Traders, Sime Darby* eased 4 to 99p xd reflecting continuing concern about the decision to change auditors. **Jamaica Sugar**, however, edged forward 2 to 17p following details of the deal whereby the company is selling all its sugar interests to the National Sugar Company.

Investment Trusts had an easier bias with **Rothschild** losing 3 to 200p and **Caledonia Investments** 4 to 266p.

In Shipping, **Lofs** closed a penny harder at 35½p following an investment recommendation. **P and O Deferred** also ended a penny better at 80p, while **Furness** *Withy held steady at 234p in front* of today's interim statement. Elsewhere, further speculative interest in a thin market lifted **Milford Docks** 8 to 128p.

Dawson International, 202p, and the "A," 201p, both finished a penny cheaper following the *dividend and profits forecast and* capital proposals contained in the company's letter to shareholders rejecting the bid from **Wm. Baird**, 4 lower at 178p. Elsewhere in the Textile sector, **UU** improved ½ to 7p on the proposed financial reorganisation of the company *involving a merger with* **E. Salbstein**. Revived demand left **Levex** 1¼ higher at 16p and **D. Dixon** 5 dearer at 108p, while **Albion** responded to Press mention with a rise of 6 to 26p.

South Africans lost ground with **Abercom Investments** and **Anglo-Transvaal Industries** *both finishing* 6 cheaper at 98p and 113p respectively. Plantations closed with a mixed appearance following a slow trade.

Golds down again

Concern over the Namibian political situation coupled with the 50 cents decline in the bullion price to $224.375 per ounce, prompted further selling of South African Gold shares.

The Gold Mines index fell another 6.7 to 153.7 — its fourth consecutive loss and its lowest level since June 2. Also affecting Golds was a further downturn in the investment currency premium.

Selling of Golds was by no means heavy but the absence of any buyers caused jobbers to mark down prices throughout the day.

Falls among the heavyweights ranged to £1½, as in **Randfontein**, £31, while **West Driefontein** dropped a point to £22 and **Western Holdings**, ½ to £19.

The easiness in the UK equity market saw London-based Financials lose ground. **Gold Fields** fell 7 to 175p ex-dividend, **Rio Tinto-Zinc** 5 to 253p and **Charter** 3 to 151p.

On the other hand, Platinums generally improved helped by favourable week-end Press comment. **Lydenburg** *added 4 to 77p* ex-dividend, **Rustenburg** 3 to 108p *ex-dividend* and **Bishopsgate** a penny to 106p.

The fall in the investment premium coupled with a decline in overnight domestic markets left Australians lower across the board.

A lone firm spot, however, were **Pacific Copper**, which advanced 10 to 68p following talk that the company had signed an agreement with BOC to supply the latter with tungsten from its Torrington mine for the next five years.

Diamond exploration issues all fell away as did the majority of base-metal producers and Uraniums.

Elsewhere, the surge in tin prices on the London Metal Exchange prompted a good *demand for the Cornish tin producers.* **Saint Piran** and **Geevor** were both 5 higher at 76p and 155p respectively, while **South Crofty** put on 3 to 67p.

FINANCIAL TIMES STOCK INDICES

—	Oct. 16	Oct. 13	Oct. 12	Oct. 11	Oct. 10	Oct. 9	A year ago
Government Secs.	68.79	69.06	69.65	69.63	69.87	69.87	76.65
Fixed Interest	70.60	71.42	71.71	71.74	71.87	71.85	78.49
Industrial	494.6	496.2	505.8	504.2	509.3	510.2	499.1
Gold Mines	153.7	160.4	167.1	168.4	168.6	167.1	174.0
Ord. Div. Yield	5.44	5.42	5.33	5.35	5.29	5.28	5.40
Earnings, Y'ld % (full)*	15.08	15.04	14.79	14.83	14.69	14.66	16.00
P/E Ratio (net) (*)	8.78	8.80	8.95	8.92	9.01	9.03	8.69
Dealings marked	5,135	4,940	4,353	4,852	4,835	4,594	5,657
Equity turnover £m	—	90.71	75.96	65.51	77.51	59.56	84.95
Equity bargains total	—	16,475	14,135	15,312	15,330	13,657	15,918

10 am 492.2. 11 am 492.9. Noon 491.5. 1 pm 491.0. 2 pm 491.8. 3 pm 491.3.

Latest Index 01-246 8026.

* Based on 52 per cent corporation tax. † Nil=8.54.

Basis 100 Govt. Secs. 15/10/26. Fixed Int. 1928. Ind. Ord. 1/7/35. Gold Mines 12/9/55. SE Activity July-Dec. 1942.

HIGHS AND LOWS

—	1978 High	1978 Low	Since Compilation High	Since Compilation Low
Govt. Secs.	78.58 (6/1)	68.79 (5/6)	127.4 (9/1/35)	49.18 (3/1/75)
Fixed Int.	81.27 (9/1)	70.73 (5/6)	150.4 (28/11/47)	50.53 (3/1/75)
Ind. Ord.	535.5 (14/9)	433.4 (2/3)	549.2 (14/9/77)	49.4 (26/6/40)
Gold Mines	206.6 (14/8)	130.3 (6/1)	442.3 (22/5/75)	43.5 (26/10/71)

S.E. ACTIVITY

	Oct. 16	Oct. 13
—Daily		
Gilt-Edged	167.7	165.4
Industries	163.0	172.3
Speculative	42.0	38.1
Totals	116.8	112.4
5-day Average		
Gilt-Edged	163.1	166.7
Industries	166.8	160.6
Speculative	43.3	43.4
Totals	109.8	107.3

OPTIONS

DEALING DATES

First Dealings	Last Dealings	Last Declaration	For Settlement
Oct. 10	Oct. 23	Jan. 11	Jan. 23
Oct. 24	Nov. 6	Jan. 25	Feb. 6
Nov. 7	Nov. 20	Feb. 8	Feb. 20

For rate indications see end of Share Information Service

Money was given for the call in English Property, Consolidated Gold Fields, London and Northern, Pacific Copper, Shell Transport, Brocks, Premier Consolidated Oil, Regalian Properties, Ferranti, P. and O. Deferred, EMI, UDT, Time Products, Camford, Amalgamated Stores, S. Sherman, and House of Fraser, while doubles were arranged in English Property, Barrow Hepburn, Brooke Bond, Glaxo, Brentnall Beard and Premier Consolidated Oil.

RISES AND FALLS YESTERDAY

	Up	Down	Same
British Funds	6	59	11
Corpns. Dom and Foreign Bonds	2	28	32
Industrials	158	645	728
Financial and Prop.	29	232	253
Oils	—	11	25
Plantation	7	12	12
Mines	14	86	40
Recent Issues	5	17	22
Totals	221	1,090	1,128

NEW HIGHS AND LOWS FOR 1978

The following securities quoted in the Share Information Service yesterday attained new Highs and Lows for 1978.

NEW HIGHS (27)

CANADIANS (1)
Brascan

CHEMICALS (1)
Farm Feed

STORES (2)
Helene of London Wallis

ENGINEERING (4)
Birmingham Mint Mining Supplies
Brown & Tawse United Engineering

FOODS (1)
Edwards (L. C.)

INDUSTRIALS (3)
Inter-City Whitecroft
Relyon PBWS

PAPER (1)
Tridant

PROPERTY (4)
Country & N. Town Regalian
Mountview *Stock Conversion*

SHIPPING (1)
Milford Docks

SHOES (1)
Lambert Howarth

TEXTILES (2)
Dixon (D.) Levex

TRUSTS (2)
Camellia Invs. Common Mkt. Trust

TEAS (1)
Assam Dooars

MINES (3)
Saint Piran Tehidy Minerals
South Crofty

NEW LOWS (45)

BRITISH FUNDS (25)
Treas. 11¼pc 1979 *Exchqr. 13¼pc 1996*
Exchqr. 9½pc 1981 Exchqr. 10½pc 1997
Treas. 14pc 1982 Treas. 8¾pc 1997
Exchqr. 9¼pc 1982 Treas. 6¾pc '95-98
Treas. 12pc 1983 Treas. 15½pc 1998
Treas. 9¼pc 1983 Exchqr. 12pc 1998
Exchqr. 12¼pc 1992 Treas. 10½pc 1999
Funding 6pc 1993 Exchqr. 12pc '99-02
Treas. 14½pc 1994 Treas. 8pc 2002-06
Treas. 9pc 1994 Treas. 5½pc '08-12
Treas. 12¾pc 1995 Treas. 3pc '66 aft.
Treas. 9pc '92-96 *Treas. 2½pc*
Treas. 15¼pc 1996

CORPORATION LOANS (4)
G.L.C. 12½pc 1982 Birm. 9¼pc '79-81
Do. 12½pc 1983 Glasgow 9¼pc '80-82

COM'WEALTH & AFRICAN LOANS (1)
N.Z. 7½pc '83-86

FOREIGN BONDS (1)
Ireland 7½pc '81-83

CHEMICALS (1)
Leigh Interests

ENGINEERING (4)
Birmid Qualcast Sykes (H.)
Lane (Percy) Weeks Assoc.

FOODS (1)
England (J. E.)

INDUSTRIALS (3)
Hestair W" Ribbons
Trafalgar House

INSURANCE (4)
Commercial Union Legal & General
Heath (C. E.) Willis Faber

TEXTILES (1)
Courtaulds 7pc Deb. 1982-87

LONDON TRADED OPTIONS

Option	Ex'rcise price	Oct. Closing offer	Oct. Vol.	Jan. Closing offer	Jan. Vol.	Apr. Closing offer	Apr. Vol.	Equity close
BP	900	20	—	61	10	91	5	916p
BP	950	2	—	33	1	62	—	..
Com Union	140	3	—	10	30	15	—	137p
Com Union	160	½	—	3½	30	6	4	..
Cons Gold	180	2½	1	15	40	23	—	177p
Cons Gold	200	½	7	6	—	14	5	..
Courtaulds	110	10	5	13	—	16	—	119p
Courtaulds	120	2	13	7½	—	11	—	..
Courtaulds	130	½	—	3½	23	7	—	..
GEC	330	3	—	21	5	32	—	323p
GEC	360	1	—	9	30	18	—	..
Grand Met	100	10	10	17½	—	20½	—	109p
Grand Met	120	¼	—	4½	4	8	—	..
ICI	360	30	—	42	3	49	—	387p
ICI	390	5½	—	22	13	29	—	..
ICI	420	½	—	11	5	15	2	..
Marks & Sp.	70	13	6	16	—	20	—	82p
Marks & Sp.	80	4	5	8½	—	12	3	..
Marks & Sp.	90	1	—	4½	—	7	4	..
Shell	550	23	—	50	12	62	—	570p
Shell	600	3	—	20	—	31	6	..
Totals			47		206		28	
		November		February		May		
BOC Intl.	80	1	2	2½	—	3½	—	69p
Boots	220	1½	9	7	—	13	—	196p
Boots	240	½	—	3	33	7	—	..
Boots	260	½	—	¾	14	3	—	..
EMI	140	19	—	22	3	28	—	154p
EMI	160	6	1	11	—	17	—	..
Imperial Gp.	80	4	7	7½	—	8	—	81p
Imperial Gp.	90	2	—	3½	20	4	13	..
RTZ	240	22	—	32	10	41	10	254p
RTZ	260	9	4	19	20	30	—	..
RTZ	280	3	—	11	5	19	—	..
Totals			23		105		23	

APPOINTMENTS

Changes at Taylor Woodrow

Mr. P. R. L. Drew, Mr. J. Millar and Mr. R. P. Whitehouse, have been appointed to the first divisional directorships in the history of the parent Board of TAYLOR WOODROW.

TAYLOR WOODROW INTERNATIONAL has appointed four additional directors—Mr. M. Angwin, Mr. G. Craig, Mr. W. Hoghin and Mr. C. Stott. Mr. A. Jarvis has been appointed a divisional director.

Mr. J. Mason has been made managing director of TAYLOR WOODROW PLANT COMPANY.

Increased activities across the Border have prompted Taylor Woodrow Homes to form a wholly-owned subsidiary—TAYLOR WOODROW HOMES (SCOTLAND). The Board consists of Mr. D. Slough, chairman, Mr. W. Goodhew, managing director; Mr. A. Sayers, director and company secretary and Mr. D. Taylor. Mr. Slough is chairman and managing director of the parent company, which has interests in Sarasota, Florida, U.S. Taylor Woodrow Homes has appointed four divisional directors—they are Mr. T. Fairclough, Mr. R. Pope, Mr. R. Postlethwaite and Mr. R. Stephens.

Mr. E. Woolnough has become chairman of PHILLIPS CONSULTANTS, a Taylor Woodrow Group company.

E. AND D. TAYLOR (INSURANCE BROKERS), a member of the Taylor Woodrow Group, has appointed Mr. R. Morbey to its Board.

★

Mr. Victor Matthews, deputy chairman and chief executive of Trafalgar House and chairman of Beaverbrook Newspapers, is among leading industrialists in 18 new fellowships announced by the BRITISH INSTITUTE OF MANAGEMENT.

The others are Mr C S Aston, chairman, Powell Duffryn; Mr. R C. Hesketh-Jones, managing director, BOC International; Mr. I. F. D. Hill, chairman, Kwik Save Discount Group; Mr J. M. Wotherspoon, chairman, Singer Company (UK); Mr. W. L. B. Shankland, managing director, BICC Cables; Mr R. E Robinson, chairman, Robinson and Sons; Mr. J. A. Leavey, director, Smith and Nephew Associated Companies; Mr R J French, group chief executive, Lake and Elliot; Mr. Dennis Turner, managing director, W. E. Norton (Machine Tools); Mr. A. C. French, vice-chairman, Singer Company (UK); Mr. W K. Fraser, permanent secretary, Scottish office; Mr P B Lake, chairman, Lake and Elliot; Mr. T. E. Spratt, chairman and managing director, Safeway Food Stores; Mr P. A. Thompson, chief executive, National Freight Corporation; Mr. G. N. Corah, chairman and joint managing director, Corah; Mr. E. R Griffiths, deputy chairman, J. Sainsbury and Co and Mr H. L. Beckers, group research co-ordinator, Royal Dutch Shell Group of Companies.

Main qualification for BIM Fellowship, which is by invitation only, is "eminent achievement" in the practice of management and/or administration. People who have made "outstanding and original contributions" to the body of management knowledge or theory may also be elected.

Miss G. Plaxton, a non-executive *director of* PLAXTONS (SCARBOROUGH), has resigned due to poor health. Mr. J. E. Oates has been appointed a non-executive director.

★

Sir Charles Troughton has joined the main board of WHITBREAD AND CO. as a non-executive director. He is currently chairman of the British Council, and was formerly chairman of W. H. Smith and Son (Holdings).

★

Mr. Ronald Marshall, director of *manufacture of* DAVID BROWN TRACTORS, Meltham, has been nominated deputy managing director. The company is a subsidiary of the multi-industry organisation, Tenneco Inc., of Houston Texas and operates as an affiliate of another Tenneco subsidiary, the J. I. Case Company, of Racine, Wisconsin.

★

STATEBOURNE CRYOGENICS, manufacturer of cryogenic storage vessels and equipment, has formed Statebourne Cryogenic Services to handle repair and servicing of cryogenic equipment. Mr. D. H. Tantam, formerly head of BOC Cryoproducts, and later business development manager of BOC cryospeed gases division, has joined the Board of both Statebourne companies.

★

Mr. P. E. Hutson succeeds Mr. Angus Macqueen as chairman of the BRITISH BANK OF THE MIDDLE EAST on January 1. Mr. Macqueen will continue as a director of the bank.

★

Mr. J M Buist, sales director of Anchor Chemical Company, has been re-elected president of the PLASTICS AND RUBBER INSTITUTE. Dr. P. L Clegg has been re-elected chairman of council of the Institute for the year 1978-79.

★

Following the sale of the GAILEY CARAVAN GROUP to Black and Edgington, Mr. J. E. Dodds-Smith, managing director of Gailey, has resigned from the Board of J F Nash Securities.

★

MITCHELL SOMERS, engineering group, announces that Mr. M R N. Moore has been appointed a director.

★

Air Vice-Marshal A. D. Dick, who retires shortly from the RAF becomes secretary of the BRITISH ASSOCIATION OF OCCUPATIONAL THERAPISTS in January.

★

On November 13, the stock-broking companies Penney Castello and Co., and Carlebach Scott Young and Co., will merge to *form* PENNEY CASTELLO CARLEBACH. The firm will remain based in Glasgow. Four partners of Carlebach Scott Young will join the partnership in the London office. Partners of the new company will be: Mr. A. J. B. Agnew, Mr B. H. N. Carvalho, Mr G B. Scott, Mr. R. N. Bruxner-Randall, Mr S. J. Castello, Mr. A. W. Farr, Mr D. H Galbraith, Mr. J. Henderson, Mr J. A. Lepine, Mr J. L. Paterson, Mr. J. M. Tolmie, Mr. J S. Trotman, Mr K. F. Tulloch and Mr H. J. Whing.

Rear Admiral J. D. E. Fieldhouse *is to be promoted* Vice Admiral and to be Controller of the ROYAL NAVY, in succession to Admiral Sir Richard Clayton, in January. This appointment carries with it membership of the Admiralty Board of the Defence Council.

★

Mr. Dennis S. Kenyon, joint managing director of the T. W. Kempton Group, Leicester, has been appointed vice chairman of the KNITTING INDUSTRIES' FEDERATION'S Industrial Relations Board, *which forms the* employers' side of the industry's National Joint Industrial Council, covering over 70,000 workers.

★

Mr. Brian A. Johnson has been appointed managing director of WESTON HYDRAULICS, Birmingham, which designs and manufactures hydraulic cylinders (subsidiary of the Butterfield-Harvey Group). He moves from the Board of AE-Covrad.

★

Mr. Peter Lloyd has been *appointed director of marketing* of CANNON ASSURANCE.

★

ECONOMIC FORESTRY (SCOTLAND) has appointed Mr. R. I. Shaw as finance director designate.

★

Mr. J. H. R. Marcroft has resigned from the Board of MAURICE JAMES INDUSTRIES but continues as a consultant to the group.

CONTRACTS

Compressors and turbines for Russia

An order for compressors and turbines worth £12m for installation at Tomak and Gubana *in the USSR* has been received by ELLIOTT TURBOMACHINERY. From Davy Powergas, the order is for two compressor and steam turbine trains, totalling over 24,000 hp, and will be built and tested at Elliott's factory on the Isle of Wight. The maker is a *subsidiary of Carrier Corporation,* U.S.

★

An expansion of the secondary radar capability by the RAF at Spadeadam, near Carlisle, has resulted in a £130,000 order for a COSSOR ELECTRONICS' SSR 700 *system. This includes antennas,* transmitter/receivers and video processing equipment which will be installed to interface with existing primary radar. All equipment is designed and manufactured by Cossor at Harlow, Essex. The system provides *facilities for recognition of special* reply codes, elimination of mutual interference and read-out of designated aircraft codes and altitudes. It will provide raw radar information for the Spadeadam air traffic controllers.

ACTIVE STOCKS

Stock	Denomination	No. of marks	Closing price (p)	Change on day	1978 high	1978 low
GEC	25p	10	323	− 1	340	233
ICI	£1	9	388	− 2	421	328
Shell Transport	25p	8	570	− 6	602	484
Beecham	25p	7	690	—	743	583
Boots	25p	7	197	− 1	237	184
BP	£1	7	916	—	926	720
Grand Met.	50p	7	109	− ½	121	87
Marks & Spencer	25p	7	82	—	94	67½
BATs Defd.	25p	6	296	− 7	384	227
Commercial Union	25p	6	136	− 2	164	136
Cons. Gold Fields	25p	6	175xd	− 7	204	163
Distillers	50p	6	196	− 3	215	163
Imperial Group	25p	6	82	− ½	89	71½
Midland Bank	£1	5	343	− 1	390	330
Bowater	£1	5	191	− 1	212	163

RECENT ISSUES

EQUITIES

[illegible]

FIXED INTEREST STOCKS

[illegible]

"RIGHTS" OFFERS

[illegible]

FT-ACTUARIES SHARE INDICES

These indices are the joint compilation of the Financial Times, the Institute of Actuaries and the Faculty of Actuaries

EQUITY GROUPS — GROUPS & SUB-SECTIONS

Figures in parentheses show number of stocks per section

		Mon., Oct. 16, 1978 Index No.	Day's Change %	Est. Earnings Yield % (Max.) Corp. Tax 52%	Gross Div. Yield % (ACT at 33%)	Est. P/E Ratio (Net) Corp. Tax 52%	Fri. Oct. 13 Index No.	Thur. Oct. 12 Index No.	Wed. Oct. 11 Index No.	Tues. Oct. 10 Index No.	Year ago (approx.) Index No.
1	CAPITAL GOODS (171)	239.21	−0.7	16.16	5.23	8.50	241.02	246.05	245.91	247.67	211.33
2	Building Materials (27)	206.51	−1.0	17.03	5.48	8.09	208.51	211.96	210.62	212.35	201.60
3	Contracting, Construction (28)	369.70	−1.2	18.76	4.29	7.74	374.07	381.66	383.85	387.69	344.94
4	Electricals (14)	557.95	−0.4	12.99	3.32	10.64	560.24	578.36	580.58	583.72	456.94
5	Engineering Contractors (14)	373.55	−0.8	17.78	5.82	7.63	376.67	382.24	381.76	382.32	300.86
6	Mechanical Engineering (72)	188.56	−0.9	17.58	5.79	7.61	190.24	193.15	192.57	194.42	161.88
8	*Metals and Metal Forming (18)*	*167.01*	*−0.5*	15.99	8.53	8.66	*167.90*	170.78	170.42	171.19	*158.72*
	CONSUMER GOODS										
11	(DURABLE) (53)	213.42	−0.9	16.09	4.97	8.68	215.44	218.70	218.26	219.54	202.06
12	Lt. Electronics, Radio, TV (16)	261.33	−1.2	14.09	3.91	9.96	264.38	269.31	269.17	271.31	246.72
13	Household Goods (12)	185.70	−0.9	16.04	6.10	8.59	187.36	188.40	187.78	187.63	186.65
14	Motors and Distributors (25)	127.85	−0.6	19.42	6.48	7.18	128.60	130.10	129.54	130.03	119.85
	CONSUMER GOODS										
21	(NON-DURABLE) (172)	211.63	−1.0	15.60	5.81	8.64	213.73	217.78	217.28	218.96	201.93
22	Breweries (14)	227.05	−1.1	14.75	6.25	9.33	229.56	233.40	232.13	234.13	212.43
23	Wines and Spirits (6)	276.57	−1.5	15.39	5.20	9.69	280.67	287.55	286.59	290.41	236.09
24	Entertainment, Catering (17)	265.84	−0.6	13.67	6.56	10.67	267.50	272.62	272.44	275.45	250.55
25	Food Manufacturing (19)	207.20	−0.4	18.67	5.22	7.09	208.06	211.96	211.58	214.10	206.51
26	Food Retailing (15)	226.02	−1.0	13.37	4.56	10.40	228.20	232.55	232.73	234.67	228.37
32	Newspapers, Publishing (12)	393.23	−0.7	19.44	6.15	7.22	395.90	398.53	396.69	398.37	336.73
33	Packaging and Paper (15)	144.86	−1.2	17.78	7.40	7.41	146.66	148.51	148.62	149.26	136.96
34	Stores (40)	198.08	−1.0	11.16	4.61	13.05	200.09	205.81	204.00	205.00	191.42
35	Textiles (25)	183.55	−0.6	17.96	7.59	7.24	184.72	188.22	186.58	188.29	173.40
36	Tobaccos (3)	236.32	−1.7	23.30	7.93	5.08	240.39	242.56	244.16	245.15	225.83
37	Toys and Games (6)	111.34	−2.4	20.36	5.77	5.74	114.07	116.20	116.56	117.56	107.19
41	OTHER GROUPS (99)	207.05	−0.8	15.15	5.88	8.51	208.65	211.46	211.62	213.35	200.98
42	Chemicals (19)	293.13	−0.4	15.68	6.47	8.30	294.16	296.71	296.66	300.93	275.88
43	Pharmaceutical Products (7)	266.68	−0.3	10.68	3.89	11.48	267.57	269.97	270.80	273.56	0.00
44	*Office Equipment (6)*	*136.04*	*+0.1*	*17.86*	*5.59*	*6.68*	*135.97*	139.95	140.18	*140.55*	*130.57*
45	Shipping (10)	417.48	−0.1	14.89	7.31	8.58	417.93	423.95	424.68	425.49	493.96
46	Miscellaneous (57)	221.91	−1.7	16.94	6.35	7.85	225.82	229.84	229.82	230.50	205.67
49	INDUSTRIAL GROUP (495)	224.54	−0.9	15.67	5.62	8.57	226.49	230.53	230.28	232.02	211.13
51	Oils (5)	511.72	−0.5	13.66	3.93	7.95	514.30	517.85	514.75	516.48	504.44
59	500 SHARE INDEX	248.50	−0.8	15.36	5.36	8.47	250.53	254.58	254.12	255.88	235.33
61	FINANCIAL GROUP (100)	163.08	−1.0	—	5.96	—	164.78	166.79	167.04	167.28	170.33
62	Banks (6)	*185.07*	*−0.6*	25.26	6.33	5.94	*186.27*	*186.59*	*186.17*	185.83	178.85
63	Discount Houses (10)	206.55	−0.5	—	8.37	—	207.66	209.14	208.99	206.90	227.10
64	Hire Purchase (5)	151.98	−0.4	16.03	5.42	8.23	152.62	155.48	156.69	158.63	183.74
65	Insurance (Life) (10)	128.42	−2.3	—	7.31	—	131.45	135.21	136.01	138.09	148.76
66	Insurance (Composite) (7)	119.91	−1.2	—	7.31	—	121.32	123.64	124.25	124.08	146.13
67	Insurance Brokers (10)	327.15	−1.7	14.50	5.06	9.86	332.80	337.54	342.34	342.50	318.36
68	Merchant Banks (14)	81.35	−1.3	—	5.98	—	82.44	83.04	83.46	84.10	91.03
69	Property (31)	257.66	−0.6	3.35	2.85	51.29	259.25	262.18	260.56	261.47	226.25
70	Miscellaneous (7)	108.68	−0.4	23.23	7.69	5.57	109.15	109.64	109.59	108.45	104.91
71	Investment Trusts (50)	220.33	−0.8	3.16	4.72	31.63	222.07	224.15	223.98	225.01	196.13
81	Mining Finance (4)	109.12	−2.8	16.73	6.53	7.29	112.28	114.08	112.62	112.49	101.82
91	Overseas Traders (19)	322.96	−0.5	15.09	7.12	8.31	324.75	328.46	329.05	330.05	284.92
99	ALL-SHARE INDEX (673)	226.51	−0.9	—	5.49	—	228.51	231.97	231.65	232.97	216.96

FIXED INTEREST PRICE INDICES

	British Government	Mon. Oct. 16	Day's change %	xd adj. To-day	xd adj. 1978 to date
1	Under 5 years	103.75	−0.04	—	7.38
2	5-15 years	112.79	−0.36	—	7.61
3	Over 15 years	116.68	−0.34	8.31	11.73
4	Irredeemables	125.15	−0.43	—	9.82
5	All stocks	110.48	−0.23	0.12	9.36

FIXED INTEREST YIELDS — Br. Govt. Av. Gross Red.

			Mon. Oct. 16	Fri. Oct. 13	Year ago (approx.)
1	Low	5 years	9.25	9.21	[illegible]
2	Coupons	15 years	11.36	11.24	[illegible]
3		25 years	11.72	11.69	[illegible]
4	Medium	5 years	12.31	12.30	[illegible]
5	Coupons	15 years	12.52	12.45	[illegible]
6		25 years	12.56	12.49	[illegible]
7	High	5 years	12.36	12.33	[illegible]
8	Coupons	15 years	13.18	13.04	[illegible]
9		25 years	13.22	13.17	[illegible]
10	Irredeemables		11.94	11.88	[illegible]

		Mon. Oct. 16 Index No.	Yield %	Fri. Oct. 13	Thur. Oct. 12	Wed. Oct. 11	Tues. Oct. 10	Mon. Oct. 9	Friday Oct. 6	Thurs. Oct. 5	Year ago (approx.)
15	20-yr. Red. Deb & Loans (15)	56.70	13.09	57.25	57.24	57.66	57.70	57.70	57.72	57.70	63.09
16	Investment Trust Prefs. (15)	51.35	13.62	51.32	51.62	51.66	51.74	51.74	51.77	51.74	56.68
17	Coml. and Indl. Prefs. (20)	71.73	13.04	71.63	71.60	71.40	71.39	71.29	71.37	71.87	75.33

† Redemption yield. Highs and lows record, base dates and values and constituent changes are published in Saturday issues. A list of the constituents is available from the Publishers, the Financial Times, Bracken House, Cannon Street, London, EC4P 4BY, price 15p, by post 22p.

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OFFSHORE AND OVERSEAS FUNDS

INSURANCE AND PROPERTY BONDS

Midland Bank Group Unit Trust Managers Ltd.♥ (a)
Courtwood House, Silver Street, Head. Sheffield, S1 3RD. Tel 0742 79842

Commodity & Gen.	72.6	78.2	.....	4.99
Do. Accum.	83.7	90.1	.....	4.99
Growth	37.4	40.2	.....	2.84
Do. Accum.	40.2	43.2	.....	2.84
Capital	28.3	30.4	.....	3.13
Do. Accum.	30.9	33.2	.....	3.13
Income	53.8	57.9	.....	6.47
Do. Accum.	62.7	67.5	.....	6.47
International	46.5	50.3	.....	2.34
Do. Accum.	49.7	53.6	.....	2.34
High Yield	64.1	69.0xd	.....	8.18
Do. Accum.	70.0	75.3	.....	8.18
Equity Exempt*	104.7xd	110.5	.....	5.63
Do. Accum.*	104.7xd	110.5	.....	5.63

*Prices at Sept. 29. Next dealing Oct. 31.

CORAL INDEX: Close 490-495 N.T. 493-498

INSURANCE BASE RATES

†Property Growth 10¼%
†Vanbrugh Guaranteed 9.87%
†Address shown under Insurance and Property Bond Table.

Hill Samuel Overseas Fund S.A.
37, Rue Notre-Dame, Luxembourg
$US20.75 | 21.50 | −0.07 | —

International Pacific Inv. Mngt. Ltd.
PO Box R237, 56, Pitt St, Sydney, Aust.
Javelin Equity Tst. | $A2.43 | 2.55 | ..... | —

J.E.T. Managers (Jersey) Ltd.
PO Box 194, Royal Tst. Hse., Jersey 0534 27441
Jersey Extrnl Tst. | 191.0 | 204.0 | ..... | —
As at Sept. 29. Next sub. day Oct. 31.

Jardine Fleming & Co. Ltd.
46th Floor, Connaught Centre, Hong Kong

Jardine Estn. Tst.	HK$353.70	.....	2.00
Jardine J'pn. Fd.*	HK$412.61	.....	0.80
Jardine S.E.A.	$US19.74	.....	1.80
Jardine Flem. Int.	HK$12.48	.....	—
Intl. Pac. Secs. (Inc.)	HK$14.75	.....	—
Do. (Accum.)	HK$14.90	.....	—

NAV Sept. 30. *Equivalent $US87.21. Next sub. Oct. 13.

U.S. Tst. Inv. Fnd. | $US11.36 | −0.01 | 0.88
Net assets Oct. 13

S. G. Warburg & Co. Ltd.
30, Gresham Street, EC2. 01-600 4555

Conv. Bd. Oct. 13	$US9.75		−0.05	—
Eng. Int. Oct. 13	$US18.93		−0.17	—
Gr. St. $Fd. Aug. 31	$US7.58		.....	—
Merc. Ebd. Oct. 11	$US10.47	10.50	.....	0.0062
Merc. Mny. Mkt. Oct. 9	£10.03	10.05	.....	—

Warburg Invest. Mngt. Jrsy. Ltd.
1, Charing Cross, St. Helier, Jsy. CI 0534 73741

CMF Ltd. Sept. 28	$US13.99	14.25	.....	—
CMT Ltd. Sept. 28	£14.39	14.76	.....	—
Metals Tst. Sept. 21	£12.38	12.68	.....	—
TMT Oct. 13	$US11.39	11.69	.....	—
TMT Ltd. Oct. 13	£11.11	11.40	.....	—

World Wide Growth Management⊕
10a, Boulevard Royal, Luxembourg
Worldwide Gth. Fd. | $US16.78 | −0.05 | —

NOTES

Prices do not include $ premium, except where indicated ♦, and are in pence unless otherwise indicated. Yields % (shown in last column) allow for all buying expenses. a Offered prices include all expenses. b To-day's prices. c Yield based on offer price. d Estimated. g To-day's opening price. h Distribution free of U.K. taxes. p Periodic premium insurance plans. s Single premium insurance. x Offered price includes all expenses except agent's commission. y Offered price includes all expenses if bought through managers. z Previous day's price. ♥ Net of tax on realised capital gains unless indicated by ⊕. ¶ Guernsey gross. ∅ Suspended. ♦ Yield before Jersey tax. † Ex-subdivision.

FT SHARE INFORMATION SERVICE

BRITISH FUNDS

BONDS & RAILS—Cont.

AMERICANS

CANADIANS

BANKS AND HIRE PURCHASE

1978 High	Low	Stock	Price	+ or —	Div Net	Cvr	Gr's	P/E
260	185	Guinness Peat	230	-5	10.31	—	6.7	—
217	155	Hambros	190	......	9.76	—	7.7	—
100	81	Hill Samuel	92	-1	4.97	—	8.1	—
600	237	Do. Warrants	287	......	—	—	—	—
360	203	Hong Shng $2.50.	299	+3	hQ59c	—	2.3	—
69	52	Jessel Toynbee	62	......	h3.32	—	8.0	—
215	160	Joseph (Leo) £1	185	......	8.74	—	7.0	—
52	37	Keyser Ullmann	49	......	0.67	—	2.0	—
74	56	King & Shax 20p	62	......	3.44	—	8.3	—
114	90	Kleinwort B.L.	94	-4	†4.18	—	6.6	—
297	242	Lloyds £1	255	-2	†9.23	4.8	5.4	5.8

INTERNATIONAL BANK

CORPORATION LOANS

COMMONWEALTH & AFRICAN LOANS

LOANS

Public Board and Ind.

Financial

FOREIGN BONDS & RAILS

Stock	Price £	+ or —	Div. % Gross	Red. Yield
[illegible]	24	......	—	—
[illegible]	41	......	—	—
[illegible]	53	......	—	£3.09
[illegible]	411	......	4½	—
[illegible]	52	......	3½	£5.94
[illegible]	50	......	6	£6.07
[illegible]	42	......	4	£4.83

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CENTRAL AFRICAN

1978 High	Low	Stock	Price	+ or –	Div. Net	Cvr	Y'ld Gr's
210	155	Falcon Rh.50c	168	.....	Q60c	ϕ	21.7
24	15	Rhod'n Corp 16½p.	17	.....	0.57	7.1	5.0
80	52	Roan Cons. K4	75	.....	—	—	—
41	32	Wankie Col. Rh.1	33xd	+1	Q9c	ϕ	16.3
17½	10	Zam.Cpr SBD0.24	16	.....	—	—	—

AUSTRALIAN

1978 High	Low	Stock	Price	+ or –	Div. Net	Cvr	Y'ld Gr's
15	10	Acmex 25c	10	.....	—	—	—
140	64	Bougainville 50 Toea	129	–2	†Q6c	1.4	3.9
131	63	BH South 50c	122	.....	—	—	—
520	150	Central Pacific	475	–25	—	—	—
335	148	Conzinc Riotinto 50c.	258	–6	‡Q10c	2.2	‡
27	9½	Endeavour 20c	23½	.....	—	—	—
72	45	G.M. Kalgoorlie $1	63	–4	—	—	—
63	18	Haoma Gold N.L.	48	–4	—	—	—
140	81	Hampton Areas 5p	125	–2	t3.55	2.0	4.2
40	10	Metals Ex. 50c	33	–1	—	—	—
223	125	M.I.M. Hldgs. 50c	202xd	–5	Q9c	1.7	2.8
39	10	Mount Lyell 25c	34	.....	—	—	—
7	1½	Newmetal 10c	6½	–¼	—	—	—
143	79	North B. Hill 50c	115	–4	Q8c	1.3	4.4
16½	9½	Nth. Kalgurli	14½	–½	—	—	—
50	12	Nth. West Mining	30	–4	—	—	—
178	117	Oakbridge $A1	135	–4	†Q11c	1.9	5.1
42	10	††Oilmin N.L.	26	–2	—	—	—
70	30	Pacific Copper	68	+10	—	—	—
£15½	750	Pancont 25c	925	–50	—	—	—
40	12	Paringa M&Ex.5p	28	–1	—	—	—
570	310	Peko-Wallsend 50c.	478	–8	Q15c	ϕ	1.9
300	50	Southern Pacific	180	.....	—	—	—
164	84	Westn. Mining 50c	142	–1	Q3c	0.7	‡
70	35	Whim Creek 20c	60	–5	—	—	—

TINS

1978 High	Low	Stock	Price	+ or –	Div. Net	Cvr	Y'ld Gr's
30	23	Amal. Nigeria	24	.....	2.81	1.3	17.4
420	240	Ayer Hitam $M1	335	+5	Q300c	ϕ	19.2
60	45	Beralt Tin	51	.....	f4.0	4.4	12.3
305	200	Berjuntai $M1	240	.....	Q110c	ϕ	9.8
155	111	Geevor	155	+5	5.04	5.8	4.8
10½	8½	Gold & Base 12½p	10½	.....	—	—	—
340	220	Gopeng Cons.	325	.....	15.23	0.9	7.1
250	130	Hongkong	230	.....	—	—	—
95	78	Idris 10p	90	.....	‡12.0	1.6	‡
11	7	Jantar 12½p	8	.....	—	—	—
84	68	Kamunting $M0.50	74	.....	Q12½c	2.1	3.6
640	450	Killinghall	630	.....	Q125	ϕ	19.8
470	280	Malay Dredging $M1	435	.....	†Q95c	0.8	4.7
78	40	♦Pahang	60	.....	†Q3.75c	0.5	‡
78	50	Pengkalen 10p	74	.....	6.60	1.3	13.3
270	165	Petaling $M1	245	.....	†Q80c	1.6	7.5
77	49	Saint Piran	76	+5	2.03	6.5	4.0
67	47	South Crofty 10p	67	+3	4.19	2.0	9.3
245	140	South Kinta $M0.50	220	.....	sQ45c	0.6	14.2
340	230	Sthn. Malayan $M1	310	.....	†Q51.3c	1.1	9.1
240	134	Sungei Besi $M1	205	.....	Q65c	5.3	6.8
85	55	Supreme Corp. $M1	70	.....	ZQ10c	—	3.1
100	65	Tanjong 15p	88	.....	5.60	0.8	11.2
100	74	Tongkah Hrbr. $A1	90	.....	[illegible]	1.6	‡
270	148	Tronoh $M1	225	.....	†Q85c	1.6	‡

COPPER

1978 High	Low	Stock	Price	+ or –	Div. Net	Cvr	Y'ld Gr's
104	70	Messina R0.50	74	–2	‡Q30c	1.9	‡

MISCELLANEOUS

1978 High	Low	Stock	Price	+ or –	Div. Net	Cvr	Y'ld Gr's
68	35	Barymin	57	–1	—	—	—
17	9	Burma Mines 17½p.	13	.....	—	—	—
300	215	Cons. Murch. 10c	245	.....	‡Q30c	2.6	‡
465	245	Northgate C$1	400	–5	—	—	—
263	164	R.T.Z.	253	–5	9.5	2.8	5.7
90	30	Sabina Inds. C$1	56	.....	—	—	—
£12	750	Tara Exptn. $1	875	–25	—	—	—
82	43	Tehidy Minerals 10p	82	+5	ϕ1.35	ϕ	2.5
185	120	Yukon Cons. C$1	155	.....	Q7c	2.9	2.2

NOTES

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Estimated price/earnings ratios and covers are based on latest annual reports and accounts and, where possible, are updated on half-yearly figures. P/Es are calculated on the basis of net distribution; bracketed figures indicate 10 per cent. or more difference if calculated on "nil" distribution. Covers are based on "maximum" distribution. Yields are based on middle prices, are gross, adjusted to ACT of 33 per cent. and allow for value of declared distributions and rights. Securities with denominations other than sterling are quoted inclusive of the investment dollar premium.

- ♦ Sterling denominated securities which include investment dollar premium.
- ● "Tap" Stock.
- * Highs and Lows marked thus have been adjusted to allow for rights issues for cash.
- † Interim since increased or resumed.
- ‡ Interim since reduced, passed or deferred.
- ‡‡ Tax-free to non-residents on application.
- ϕ Figures or report awaited.
- †† Unlisted security.
- # Price at time of suspension.
- ¶ Indicated dividend after pending scrip and/or rights issue: cover relates to previous dividends or forecasts.
- ♦ Merger bid or reorganisation in progress.
- ‡ Not comparable.
- ♦ Same interim: reduced final and/or reduced earnings indicated.
- § Forecast dividend; cover on earnings updated by latest interim statement.
- ‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend.
- ★ Cover does not allow for shares which may also rank for dividend at a future date. No P/E ratio usually provided.
- ♥ Excluding a final dividend declaration.
- ✤ Regional price.
- ‖ No par value.

a Tax free. b Figures based on prospectus or other official estimate. c Cents. d Dividend rate paid or payable on part of capital; cover based on dividend on full capital. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending. q Earnings based on preliminary figures. s Dividend and yield exclude a special payment. t Indicated dividend: cover relates to previous dividend, P/E ratio based on latest annual earnings. u Forecast dividend: cover based on previous year's earnings. v Tax free up to 30p in the £. w Yield allows for currency clause. y Dividend and yield based on merger terms. z Dividend and yield include a special payment: Cover does not apply to special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. E Issue price. F Dividend and yield based on prospectus or other official estimates for 1979-80. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1978-79. K Figures based on prospectus or other official estimates for 1978. M Dividend and yield based on prospectus or other official estimates for 1978. N Dividend and yield based on prospectus or other official estimates for 1979. P Figures based on prospectus or other official estimates for 1978-79. Q Gross. T Figures assumed. Z Dividend total to date. §§ Yield based on assumption Treasury Bill Rate stays unchanged until maturity of stock.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xc ex capital distribution.

"Recent Issues" and "Rights" Page 40

This service is available to every Company dealt in on Stock Exchanges throughout the United Kingdom for a fee of £400 per annum for each security

REGIONAL MARKETS

The following is a selection of London quotations of shares previously listed only in regional markets. Prices of Irish issues, most of which are not officially listed in London, are as quoted on the Irish exchange.

Albany Inv. 20p	26	.....
Ash Spinning	49	.....
Bertam	17	.....
Bdg'wtr. Est. 50p	330	.....
Clover Croft	25	.....
Craig & Rose £1	520	.....
Dyson (R. A.) A	37	.....
Ellis & McHdy.	67	.....
Evered	27	.....
Fife Forge	52	.....
Finlay Pkg. 5p.	21xd	.....
Graig Ship £1	140	–5
Higsons Brew.	78	–2
I.O.M. Stm. £1	172	.....
Holt (Jos.) 25p.	258	.....
N'thn. Goldsmith	67	.....
Pearce (C. H.)	190	.....
Peel Mills	21	.....
Sheffield Brick	56xd	–½
Sheff. Refrshmt.	63	.....
Sindall (Wm.)	107	.....

IRISH

Conv. 9% '80/82.	£90¼	.....
Alliance Gas	84xd	+14
Arnott	360	.....
Carroll (P.J.)	95	–4
Clondalkin	85xd	+6½
Concrete Prods.	130	.....
Heiton (Hldgs.)	48	–1
Ins. Corp.	180	.....
Irish Ropes	100	–5
Jacob	58½xd	.....
Sunbeam	33	.....
T.M.G.	200	.....
Unidare	85	.....

OPTIONS
3-month Call Rates

Industrials	
A. Brew	6½
A.P. Cement	18
B.S.R.	9
Babcock	11
Barclays Bank	25
Beecham	35
Boots Drug	15
Bowaters	16
B.A.T.	24
British Oxygen	6
Brown (J.)	20
Burton 'A'	12
Cadburys	5
Courtaulds	10
Debenhams	8
Distillers	15
Dunlop	7
Eagle Star	11
E.M.I.	14
Gen. Accident	17
Gen. Electric	18
Glaxo	40
Grand Met.	9
G.U.S. 'A'	20
Guardian	18
G.K.N.	22
Hawker Sidd.	20
House of Fraser	12
I.C.I.	20
"Imps"	6
I.C.L.	20
Inveresk	8
KCA	3
Ladbroke	17
Legal & Gen.	14
Lex Service	7
Lloyds Bank	22
"Lofs"	4
London Brick	5
Lonrho	5
Lucas Inds.	25
Lyons (J.)	10
"Mams"	7
Mrks. & Spncr	10
Midland Bank	25
N.E.I.	12
Nat. West. Bank	22
Do. Warrants	10
P & O Dfd.	8
Plessey	8
R.H.M.	5
Rank Org. 'A'	15
Reed Intnl.	12
Spillers	3
Tesco	4
Thorn	22
Trust Houses	15
Tube Invest.	30
Unilever	35
Utd. Drapery	7½
Vickers	15
Woolworths	5
Property	
Brit. Land	3¼
Cap. Counties	4½
E.P.	5
Intreuropean	4
Land Secs.	16
MEPC	12
Peachey	8
Samuel Props.	9
Town & City	1¼
Oils	
Brit. Petroleum	45
Burmah Oil	5
Charterhall	3
Shell	28
Ultramar	20
Mines	
Charter Cons.	12
Cons. Gold	14
Rio T. Zinc	16

A selection of Options traded is given on the London Stock Exchange Report page

FINANCIAL TIMES

Tuesday October 17 1978

FINAL TERMS COMPLICATED BY EXCHANGE CONTROLS

Tate to sell S. Africa stake

BY ANDREW TAYLOR AND RICHARD ROLFE

TATE AND LYLE is negotiating the sale of its remaining major South African investment—the 51.6 per cent stake in African Products which it inherited with the takeover of Manbre and Garton, in 1976.

The British sugar group is proposing to sell its holding to Anglo American Industrial Corporation (AMIC) which itself holds a 25.4 per cent stake in African Products, the starch and glucose group.

Final terms have still to be agreed. Negotiations have been complicated by South African exchange controls which restrict the amount of cash an overseas company can take out of the country when it makes a disposal.

The controls are exercised through the securities rand market. Tate said last night that it was negotiating on two fronts—with the South African Reserve Bank and with AMIC —to get the best terms possible for its shareholders.

An indication of a probable price came with a statement from the African Products board which said that minority shareholders were likely to be made an offer for their stock at around the current market price of R9.80 a share.

At this price, the group is capitalised at R36m (£21m). This values Tate's share at £10.8m. The British group has made it clear that it is only interested in the sterling sum it will raise from the deal. A spokesman said last night that the standard discount rate on the securities rand market was around 35 per cent.

If the sale goes ahead, Tate's sole remaining South African investment will be its wholly-owned Pure Cane Molasses Company, employing 57 people. Last year, Tate sold its 49 per cent interest in Illova Sugar for R8m (£3.3m).

The Illova deal was also affected by exchange controls. C. G. Smith Sugar paid 309½ cents a share for the stake but of this, Tate was only allowed to take 173¼ cents—around 56 per cent—out of the country at the normal exchange rate.

Tate denied yesterday that its proposed sale of another large slice of its South African business was for political reasons.

African Products which employs 850 workers, of whom 530 are black with a further 64 classed as coloured, made pre-tax profits of R5.1m (£2.9m) last year. In the first half of the current year, the group's profits rose from R1.9m (£1.1m) to R2.2m (£1.3m).

South African disposals,

Page 34

Retail spending drops by 1%

By Peter Riddell, Economics Correspondent

SPENDING in shops in September fell back from the buoyant level of the previous two months, but was still much higher than earlier this year.

The Department of Trade announced yesterday that the index of the volume of retail sales was provisionally estimated at 110.5 last month (1971=100, seasonally adjusted).

This represents a decline of 1 per cent on the average level of the previous two months when the payment of back-dated income tax reductions appears to have boosted sales.

The volume of spending last month was still more than 3 per cent higher than the average for the first half of this year, and 6½ per cent more than in September, 1977.

The decline in spending in September compared with the previous two months was expected by the Trade in view of the past pattern whenever payment of tax rebates had led to a temporary boost to sales—notably of durable goods—followed by a lull.

However, the retail trade expects sales to pick up again in November and December, with a good Christmas, after the increase in child and other social security benefits next month and the payment of a further stage of backdated income tax cuts.

The Retail Consortium expects the volume of sales in real terms this year to be about 5 per cent higher than in 1977, approaching but probably not exceeding the record level of 1973.

The rise in sales has been the direct result of a rapid increase in living standards of 7½ per cent in the year to the second quarter. This is officially expected to continue for the rest of 1978.

Indeed, spending should continue to increase with the prospect of a further, though smaller, rise in real incomes in the first half of next year. There is anyway considerable support for further buoyant retail sales in the high level of the personal savings ratio as households have so far saved part of their tax cuts.

The recent buoyancy of retail sales—accounting for roughly two-fifths of all consumer spending—is shown by a rise in volume of about 3 per cent between the second and third quarters.

Trade in the first nine months of 1978 was just under 5 per cent higher than in the same period last year, and 4.5 per cent above the average level throughout last year.

RETAIL SALES

		Volume 1971=100 seasonally adjusted	Value—percentage change compared with a year earlier (not seasonally adjusted)
1977	1st	103.3	+14
	2nd	102.5	+13
	3rd	104.3	+15
	4th	104.4	+13
1978	1st	106.3	+13
	2nd	108.0	+15
	3rd	111.2*	+14*
	June	108.7	+14
	July	111.4	+15
	Aug.	111.8	+15
	Sept.	110.5*	+14*

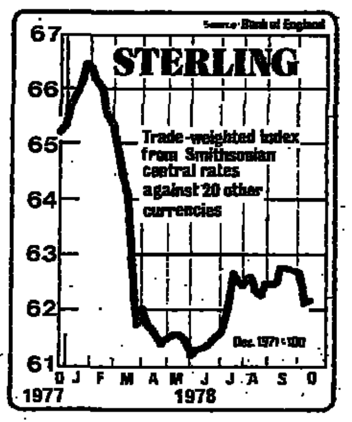
* Provisional estimate

Source: Department of Trade

THE LEX COLUMN

Sterling squeeze for companies

Index fell 1.6 to 494.6



A late setback for the dollar left sterling marginally higher yesterday on the basis of the trade-weighted index. On a day when the snake currencies were being realigned and the dollar was reacting to the passing by Congress of the U.S. Government's tax and energy bills, it was again apparent that sterling is standing on the sidelines in the present currency turmoil. But as the time approaches for a decision on whether or not to enter the European Monetary System, there is bound to be increasing speculation about whether sterling should enter the supersnake at this or at a lower level.

Politically, there will be great reluctance to accept devaluation within probably only a few months of an election which will be very largely about the Government's ability to control inflation. But this promises a nasty squeeze on the profits of companies, which are already being held down by the force of overseas competition. Analysts in the City have been puzzling over the severity of the second quarter real profits setback revealed by the national income statistics, and there is bound to be some sharp writing down of 1979 forecasts if the Government uses the sterling exchange rate to stiffen the resolve of companies in pay negotiations. Suggestions of renewed price controls can only add to the uncertainties—even though they would probably be designed more for the sake of appearances than for real impact.

NYSE/Comex

There was a time when any *established* Wall Street brokerage house would have looked with horror at a suggestion that it should dirty its hands in the commodities markets. But times have changed dramatically in the financial markets and while the cost of a seat on the New York Stock Exchange has fallen from a peak of $515,000 10 years ago to $75,000 today, the cost of a seat in a Commodity Exchange has rocketed.

Already most of the big brokerage houses are members of both the major commodities and stock exchanges and the stock exchanges themselves are finally responding to the pressures. Last month the American Stock Exchange opened its own commodities exchange to win over from Chicago some of the lucrative financial futures trading and now news has leaked out that the mighty New York Stock Exchange, the largest in the country, is thinking of linking up with New York's Comex, the third largest U.S. commodities exchange.

To an extent the securities industry has been rather slow off the mark. Indeed it was the Chicago Board of Trade, the biggest commodities exchange in the country, which pioneered the growth of securities options trading, *which* it saw as a logical spinoff from its futures trading business. However, the real pressure for integrating the commodities and securities businesses began to develop in the mid-1970s. As securities trading tailed off brokers began to look round for other sources of income, and commodities trading seemed ideal since it is reckoned that over two-thirds of all commodities speculators also trade in securities and as a general rule of thumb commodity trading does well when securities trading is depressed.

Baird/Dawson

Dawson's defence against the bid from William Baird has a touch of everything. There is a vastly higher dividend, the promise of a big asset revaluation and a profits forecast, and some naughty comments about the bidder—all stirred up with a hint of Scottish nationalism and a commitment to liberty and equality for the non-voting "A" shares.

All traditional stuff. The main point for shareholders, however, is that on present evidence the main gainer from a successful bid would be Baird. In exchange for £12.2m cash and an increase in its equity of around three-fifths, it would increase its earnings per share by anything up to a quarter, quadruple its operating cash flow, and acquire a business with net cash of over £13m at the last count. The bid is currently worth 199p per share: Dawson could earn upwards of 30p per share this year, and its prospective yield is 10½ per cent. The commercial and industrial arguments for accepting the bid are not very compelling, either.

Rugby Portland

Rugby Portland's interim pre-tax profits are just 7 per cent better at £6.3m despite a rise of over 13 per cent in group turnover. But this masks a more than 1 point improvement in the UK trading margin. Here it looks as if sales volume is up about 5 per cent against little change for the industry. So once again Rugby has slightly improved its market share. Overseas margins have narrowed slightly, largely as a result of currency movements. The factor behind the decline in the overall profit margin is a reduction of about £½m in investment income in reflection of lower interest rates and heavy capital expenditure outlays. Profits for the year could be about £15½m (£13.8m) after the pension provision—which puts the shares, at 76½p, on a prospective p/e (on a 42 per cent tax charge) of about 7.6.

Harold Perry

The curious affair of Harold Perry Motors' car leasing scheme and the Inland Revenue came to a quiet end yesterday. In a press release approved by the Revenue, Perry says it has modified the terms of its leasing agreements "as a result of which the Inland Revenue has indicated that it does not propose to pursue its objections . . ." So a cloud which descended on the leasing industry at the end of May, when Perry chose to reveal it was having problems getting its 1977 tax bill agreed, appears to have lifted.

From what Perry was saying yesterday it might appear that the company has been most unfairly treated in this case. But it should be remembered that it was Perry's decision to publicise the matter in the first place. It seems doubtful whether the company's scheme for passing old cars on to other companies in the lessee group was entirely consistent with what the tax rules demand. So, on balance, the points should probably go to Somerset House.

Perry to change car lease terms

By Andrew Taylor

HAROLD PERRY MOTORS has been given a clean bill of health by the Inland Revenue over a disputed tax charge against its car leasing business during 1977, the company said yesterday.

However, Mr. Forbes Macgregor, chairman and managing director of the group, says that Perry would be modifying certain aspects of its leasing terms.

The group's previous practice of selling cars—once the leasing agreement had run out—back to the businesses which had leased them, would be halted. These sales were carried through a third company, either a subsidiary or associate of the group.

Perry said last night that the practice had been necessary ahead of changes in leasing legislation in June last year when it was illegal to give rebates on the sale of the car back to the leasing customer.

The scheme was designed, says the group, to provide some benefits to the lessee from the then prevailing high rates of inflation which had sent second hand car values soaring. Under the current proposals the group will pay rebates to lessees.

Perry denies that there is any connection between the Inland Revenue's earlier dispute on the group's tax charge and the subsequent plans to change leasing terms.

Mr. Macgregor said that the Revenue had questioned whether cars for leasing in 1977 should have been classed as capital assets—for which the group would be eligible for tax relief—or as trading stock for ultimate sale, for which there is no relief.

He said that the Revenue after closely examining the terms of Perry's leasing agreements were satisfied that the cars had been correctly classified and that the group's tax charge of £212,000—as stated in the last annual accounts—was correct.

Steel imports may rise with price policy change

BY JOHN LLOYD

A FURTHER RISE in steel imports, already at record levels, is expected from a decision by steel stockholders to adopt a policy of recommended prices, replacing the earlier practice of a mandatory minimum price.

The decision, by the National Association of Steel Stockholders, officially ends that association's attempts to impose a minimum based on the British Steel Corporation's list prices.

This resulted in stockholders buying large quantities of cheaper EEC and third country steels, which were up to 10 per cent cheaper than BSC products, while selling them at BSC list price levels.

In July import deposits were imposed on producers suspected of undercutting the guidance prices set by the Davignon Plan, an EEC programme for dealing with the steel crisis. This temporarily stemmed the inflow of some cheaper foreign steels.

There remains a significant price differential between BSC and Continental prices, especially in heavy steel sections, and the association's decision will have the effect of allowing the price of foreign steel to the consumer to come down, thus increasing demand for it.

The association appears to have taken the decision in part because of pressure from the consumers, who wanted the benefits of the price differential *passed on and of the fact that* the attempt to base prices on UK rather than European price levels contravened the Treaty of Paris provisions.

Records touched

In the first half of this year imports of steel climbed to levels rivalling the 1974 records, around 350,000 tonnes a quarter, up by about 100,000 tonnes on last year.

The British Steel Corporation is already concerned about the level of steel imports. Last week Mr. William Richardson, BSC director of prices and contracts, said that some prices charged by Continental mills and third-country producers "are too far below the minimum and guidance prices for Europe."

"We would like to see the gap narrowed. We would also like to see greater control by producers over the activities of merchants."

BSC is concerned that EEC steel producers, especially German mills, ignore the guidance prices, an integral part of the Davignon Plan.

However, the corporation appears satisfied that the Davignon Plan is working generally in its favour.

Mr. Richardson said that the plan had allowed BSC to put through price increases that would not otherwise have been possible, and that "if there had been no Davignon Plan, the corporation's loss last year would probably have been 50 per cent higher."

Cut in mortgage subsidy likely to affect 800,000 buyers

BY EAMONN FINGLETON

NEARLY 800,000 home buyers are expected to face higher mortgage costs when plans to cut the Government subsidy for option mortgages are carried out.

Participants in the option scheme go for a specially subsidised interest rate instead of tax relief on interest payments. The scheme is designed for low income families who qualify for little or no tax relief.

The subsidy is geared to be equivalent to tax relief at the lowest rate and an adjustment is now overdue to reflect the introduction of the new 25 per cent tax band in the April Budget.

The subsidy currently stands at the equivalent of 34 per cent tax relief, which was the lowest rate of tax before the Budget.

The Department of the Environment has not yet decided on the new level of the subsidy but it is likely to be between 25 per cent and 33 per cent, the main rate of tax most people pay.

In readiness for the cut, the Department has already outlined proposals for easier switching between option mortgages and ordinary ones.

In a discussion paper which has been circulated to the Building Societies Association and other interested parties the Department points out that easier switching will be essential if the subsidy is cut.

This is because many participants in the option scheme have incomes sufficiently high to entitle them to tax relief of 33 per cent on all or a large part of their interest if they had an *ordinary mortgage.*

At present an option borrower cannot normally switch in the first four years of his loan—but the Department now wants the waiting period cut to one year.

The changes are expected to be incorporated in the comprehensive housing bill the Government is planning for the next session of Parliament.

The Department calculates that if the subsidy is brought fully into line with the 25 per cent tax rate about 400,000 option borrowers would be better off by switching.

A further 400,000 borrowers *with ordinary mortgages are* currently worse off than they would be with the option mortgage scheme, because they are entitled to tax relief mainly or solely at the 25 per cent rate.

But in most cases the anomaly is expected to disappear once the new lower option subsidy comes in.

Depending on the size of the new subsidy it may still pay some tax relief borrowers to switch to the option system. To accommodate them, the rules for switching from ordinary mortgages to options are also being relaxed.

The new Housing Bill is also expected to contain provisions to tighten the rules stopping people resident outside the UK from benefiting from the option subsidy.

Under the new arrangements, a borrower will normally be allowed only one switch unless he can demonstrate an unforeseen and significant change for the worse in his financial position.

Home loans limit Page 3

Weather

UK TODAY

FOG in north. Showers elsewhere.

London, S.E. and E. England, E. Anglia

Showers. Max. 15C (59F).

Cent. S. and Cent. N. England, E. and W. Midlands

Mainly dry, sunny intervals. Max. 15C (59F).

Channel Is., S.W. and N.W. England, and S. Wales

Bright, becoming cloudy. Max. 15C (59F).

Lake District, N.E. England, Borders, Edinburgh and Dundee, Aberdeen

Bright, occasional drizzle. Max. 13C (55F).

Isle of Man, S.W., N.E. and N. Scotland, Glasgow, Cent. Highlands, Moray Firth, Argyll, Orkney, Shetland, N. Ireland

Mostly cloudy, occasional rain. Max. 10C-12C (50F-54F).

Forecast for next 28 days: Warm periods, with rather cold, sometimes windy, spells, especially in North.

BUSINESS CENTRES

		Y'day midday °C	°F			Y'day midday °C	°F
Amsterdm.	C	12	54	London	C	12	54
Athens	F	20	68	Luxemb'g	C	13	55
Barcelona	S	24	75	Madrid	C	21	70
Bahrain	S	32	90	Manchstr.	C	10	50
Belfast	F	8	46	Melbourne	R	11	52
Belgrade	F	15	59	Mexico C.	C	12	54
Berlin	F	13	55	Milan	S	15	59
Brmghm	C	12	54	Moscow	S	4	39
Bns. Aires	S	16	61	Munich	S	16	61
Bristol	C	13	55	Nairobi	S	25	77
Brussels	C	14	57	Newcastle	S	11	52
Budapest	S	17	63	New York	S	11	52
Cairo	S	30	86	Oslo	R	9	48
Cape Town	S	20	68	Paris	F	17	63
Cardiff	R	11	52	Perth	F	16	61
Chicago	R	9	48	Prague	C	8	46
Cologne	C	15	59	Reykjavik	C	5	41
Copnhagn.	S	13	55	Rome	S	20	68
Dublin	C	11	52	Stockholm	C	8	46
Edinburgh	F	11	52	Strasbrg.	C	15	59
Frankfurt	C	13	55	Sydney	C	28	82
Geneva	F	11	52	Tehran	S	21	70
Glasgow	S	10	50	Tel Aviv	S	27	81
Helsinki	S	5	41	Tokyo	S	22	72
Hong Kong	C	24	75	Vienna	C	12	54
Jo'burg	C	18	65	Warsaw	C	11	52
Lisbon	C	20	68	Zurich	C	11	52

HOLIDAY RESORTS

Ajaccio	S	21	70	Istanbul	F	18	64
Algiers	C	23	73	Jersey	C	13	55
Biarritz	S	19	66	Las Plms.	S	20	68
Blackpool	C	12	54	Locarno	S	15	59
Bordeaux	F	18	64	Majorca	S	23	73
Boulogne	C	11	52	Malaga	C	22	72
Casablnca.	S	22	72	Malta	F	22	72
Corfu	F	20	68	Naples	S	20	68
Dubrovnik	S	20	68	Nice	S	20	68
Faro	C	24	75	Oporto	[illegible]	18	64
Florence	S	18	64	Rhodes	S	23	73
Funchal	S	24	75	Salzburg	S	18	64
Gibraltar	R	21	70	Tangier	S	22	72
Guernsey	C	13	55	Tenerife	F	29	84
Innsbruck	S	16	61	Tunis	F	23	73
Inverness	C	9	48	Valencia	F	22	72
Isle of Man	F	12	54	Venice	S	18	64

S—Sunny. F—Fair. C—Cloudy. R—Rain.

Namibia talks open in Pretoria

BY QUENTIN PEEL

PRETORIA, Oct. 16.

THE CRITICAL summit meeting between South Africa and the five Western member-States of the UN Security Council to resolve the deadlock over the future of Namibia (South-West Africa), opened here today with both sides still firmly and publicly committed to their opposing viewpoints.

Officials kept a strict silence on the content of the first round of talks, which opened after news of 17 black civilian deaths in a landmine explosion on the northern Namibian border, where guerrillas are fighting South African troops.

Although the atmosphere was said to be conducive to compromise, the talks were not believed yet to have covered the main problem areas.

These include South Africa's determination to press ahead with elections in December without UN supervision.

This issue may be reached tonight, when the Western Ministers have dinner with Mr. P. W. Botha, the South African Prime Minister, and Mr. R. F. (Pik) Botha while their advisers meet elsewhere.

While South Africa was expecting a full frontal assault by the Western Ministers, Mr. Cyrus Vance, the U.S. Secretary of State, the Foreign Ministers of Britain, Canada and West Germany, and the French Deputy Foreign Minister, the Western strategy appears instead to be concentrating on those issues where compromise may be relatively simple before tackling the most difficult problems.

Thus the first morning session at the Union buildings in the State capital was attended by Gen. Magnus Malan, Chief of the South African Defence Force, suggesting that the question of enforcing a ceasefire, and the numbers of a UN peacekeeping force, were raised.

Gen. Malan's presence is seen as reinforcing the position of Mr. P. W. Botha at the talks, and emphasising South African concern for security against the diplomatic considerations of Mr. Pik Botha, the Foreign Minister, and other members of the South African team.

The other surprise development came this afternoon. Mr. Vance arrived for bilateral talks with the South African leaders without the other members of the Five.

At a meeting with Mr. P. W. Botha Mr. Vance gave him a personal letter from President Carter. No indication was given about its contents, though it was understood to be more than a mere expression of formalities.

Tax staff vote to end dispute

BY DAVID FREUD

A SPECIAL conference of the Inland Revenue Staff Federation yesterday voted overwhelmingly to end industrial action over a computer manning dispute.

The vote puts and end to Government fears that the action would be stepped up and about £700m of pay-as-you-earn income taxes, due this week, would be held up in the new computer collection centre in Cumbernauld, Scotland.

The 150 delegates at the conference, held in London, approved a resolution for the resumption of normal negotiations with the Revenue to solve the issue.

The ending of industrial action means that federation members will no longer withhold their co-operation over the transfer of manual work to computers. This is likely to mean that the collection of corporation tax in the north can now be transferred to Cumbernauld.

A second computer centre, at Shipley in West Yorkshire, to collect income and corporation tax for the south is also more likely to open on schedule next spring.

The dispute arose over the Revenue's plans to shift under 200 people involved exclusively in computer work away from the specialised department grades to general Civil Service grades. This would require those individuals to change to a union that covers the whole Civil Service.

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Germany

The Finance Ministers' failure to find any firm ground for compromise on these central and technically complex issues must arouse questions about whether the Nine will be able to put the EMS into operation on January 1, as planned.

Today's outcome represents a triumph of sorts for the UK, which can now claim that most of its EEC partners are closer to its views on how the system should work than to those of the German Government.

Only a month ago, at the last Finance Ministers' meeting, Britain was isolated as the only member of the Nine disinclined to accept a compromise exchange rate formula previously agreed in principle by Herr Schmidt and President Giscard d'Estaing of France.

Under the compromise, currencies would be defined in terms of the planned European currency unit, a weighted basket of all EEC currencies, but their maximum limits of fluctuation would be determined by a parity grid in which currencies would be directly linked to one another.

The differences now centre on what should happen when currencies deviate from their central rates in the basket without necessarily reaching their outer limits in the parity grid. Germany, Denmark and The Netherlands insist that this should merely trigger consultation between EEC monetary authorities, without any obligation to intervene or to take corrective measures.

But Britain, backed by Ireland and Italy, has insisted that intervention must occur as soon as the basket margins are reached.

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